

**THE MONETARY POLICY
OF THE
RESERVE BANK OF INDIA**

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**A Study of Central Banking
in an Undeveloped Economy**

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FOREWORD

HITHERTO the major contributions to monetary and banking theory have been developed mainly in terms of the highly organised financial systems of Western Europe and North America. In this book Mr. Raj attempts the task of examining them against the very different background of the Indian economy, and in particular of considering how far the familiar Western concepts of the functions of a central bank are applicable to a type of system which is in many ways so different from those in which the concepts were originally evolved.

After a detailed examination of recent Indian experience, especially during the years 1935/39, he comes to the conclusion that the lack of adequate credit-channels between the Reserve Bank and the ultimate users of agricultural, and sometimes industrial, credit largely frustrates the power of the central bank to exercise any real influence over the bulk of the economy. The effects of an expansion of Reserve Bank credit, for instance, are more likely to be seen in an inflationary boom in the limited range of financial and commercial markets which are in close contact with the Bank than in any easing of credit in the small towns and villages up and down the country.

To try to open up channels between the Reserve Bank and the ultimate productive users of credit, Mr. Raj makes three suggestions. The first of these is that the Reserve Bank itself should undertake a considerable amount of commercial business, perhaps by means of a merger with the Imperial Bank. Secondly, he thinks that the State should promote the development of co-operative enterprises, which would on the one hand have access to Reserve Bank credit and on the other be able to supply the needs of the agriculturist, not only for credit but also for supplies and marketing needs. And thirdly he suggests that the Reserve Bank should set up and finance separate institutions for the provision of long-term finance.

How far Mr. Raj's suggestions do in fact meet the needs of the case must be left to the judgment of those who are more conversant than I am with Indian conditions. Mr. Raj's case for *some* improvement in methods of financing small producers is, however, extremely strong ; and it seems possible that the recent inflationary rise in prices, however embarrassing in other ways, may at least have had the effect of so reducing the burden of agricultural debt as to provide the opportunity for a fresh start. Mr. Raj's suggestions deserve the most serious consideration by whoever's task it may be to decide the form which this fresh start should take.

F. W. PAISH

*Sir Ernest Cassel, Reader in Business Finance,
University of London*

July 1948

P R E F A C E

THE material for this book was collected and prepared in the course of three sessions I spent at the London School of Economics between 1944 and 1947. The handicaps involved in making a study of this nature without access to the actual scene of operations, and at a time when it was particularly difficult to secure complete and up-to-date data even from published sources, will be found to be well reflected in the text.

It is however my view that though some details may have escaped me, the main purpose of the analysis—which was to arrive at the essentials of central banking in an undeveloped economy—has been fulfilled.

Some explanation is probably required in defence of the theoretical portions of the book. On the one hand I have attached more importance to them than may appear is warranted in the belief that, however distant abstract speculation may seem from the so-called realities, it does exert a kind of subtle but determining influence on the highest levels of action. On the other hand I have found it necessary to make the discussion rather concise and concentrated in order to preserve a certain balance in the whole text. While this method of treatment has its disadvantages it has made it possible to claim that this is the first attempt of its kind to assess monetary management in India directly from the viewpoint of contemporary monetary theory. It is not suggested, however, that the treatment is either complete or has any startling revelations to make.

The only authoritative comment so far on the experience of central banking in India came from the Governor of the Reserve Bank, Sir Chintaman Deshmukh, a few months ago.¹ Since his analysis is related more to "features of the Bank's genesis, personalities and administration" than to a functional dissection of central banking in the country, it provides a most valuable supplement to what is undertaken in this book. But in view of the current interest in the question of the nationalisation of the Reserve Bank, and in view of my own conclusions on the subject in Chapter Ten, a short comment is perhaps called for.

Sir Chintaman devotes much attention to the part played by the governing Board of the Bank *vis à vis* the Government of India, and is inclined to suggest that the shareholder-ownership of the Bank has enabled it to take a more independent view of many problems than would otherwise have been possible. But he does not cite any fundamental issue on which the Bank's views can be

¹Sir C. D. Deshmukh, *Central Banking in India: A Retrospect* (Gokhale Institute of Politics and Economics, R. R. Kale Memorial Lecture, 1948).

said to have prevailed over the predilections of the Government. It also seems that at least in one instance the judgment of the Government was the better one. In 1936 when Sir Osborne Smith, the then Governor, wanted to reduce the Bank rate from 3 to 2½ per cent ("possibly at the instance of some of the Directors", says Sir Chintaman) it was the Government of India that resisted the step, resulting ultimately in the resignation of the Governor. In this matter (which is discussed in Chapter Eight of this book without any previous knowledge of the personalities involved in the opposing points of view) the Bank was probably in the wrong. Later, in 1946, the same issue, whether money should be made cheaper or not when there was already a glut of money in the market, turned up again, but this time, as Sir Chintaman reveals, it was the Bank's turn to take the sounder viewpoint. It can therefore seldom be that either of them, the Bank or the Government, is always right and the other wrong. As Sir Chintaman himself concludes, "it is not the theoretical constitution of the Institution that matters, but the spirit in which the partnership between the Ministry of Finance and the Bank is worked".

The last few months have witnessed considerable progress along lines envisaged in this book. The bill to nationalise the Reserve Bank of India is shortly to be introduced in the Dominion Parliament, while a proposal to nationalise the Imperial Bank is also in the air. The reasons that have inspired these proposals are not fully clear, but if they lead even in a halting fashion to that synthesis of central *cum* commercial banking which seems essential to monetary management in an undeveloped economy they will be steps taken in the right direction. A Banking Bill, giving far-reaching powers to the Reserve Bank to supervise the operations of the commercial banks (including 'exchange' banks) is also before the legislature, but it remains to be seen whether the provisions go far enough to meet the needs of the situation. With the Industrial Finance Corporation Act which empowers the Reserve Bank to subscribe to the shares of that Corporation, already on the Statute book, the first step has also been taken to bridge the gap between the Bank and the new issue market. Control of speculation in the stock exchanges still remains to be instituted, but it seems to be already engaging the attention of the Government. Monetary management will however stand vindicated only if it is in a position to extend the benefits of an elastic supply of money for production and distribution purposes in the Indian countryside, and of the ability or enthusiasm to do this there has as yet been little evidence. It is to be hoped that the establishment of more organic links between the Government, the Reserve Bank and the Co-operative Movement will not be delayed much longer.

In conclusion I should like to acknowledge with gratitude the assistance I have received at various stages from Professor Barret

Whole, Dr. Vera Anstey and Professor Hayek. To Mr. F. W. Paish who guided the work over its greater part and who has now kindly written the Foreword to the book I owe a debt that can never be repaid. My thanks are also due to Miss Thorne of the India House Library, but for whose cheerfulness and help I may have succumbed to the gloom that is often the lot of the research student and fallen by the wayside.

K. N. RAJ

August 1948

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STATEMENT OF THE PROBLEM

The purpose of this study is to examine the role of central banking in particular, and of monetary management in general, in India, with reference to the structural and institutional factors in its economy. The material we shall draw upon will be mainly the record of the Reserve Bank of India. In this introductory chapter an attempt is made to set in perspective the broad lines of the investigation.

THE objectives of monetary management were not a bone of contention, in the sense that they are today, until after the First World War. Before that the conviction was general that the international gold standard was a system governed by natural laws to which it was essential that every national monetary system should conform. The balance of payments of a country was accordingly accepted as the index by which money was to be managed. Such differences of opinion as existed were centred not so much on this principle itself as on the best method of putting it into effect.

Within the framework of this international standard central banking was but a nebulous idea. Some of the "classical" theories assigned to it an important part in the mechanism of adjustment between the national and international systems, namely that of changing the volume of domestic money in accordance with the balance of payments.¹ But beyond this, the central banks of the time were what they were purely as the result of certain historical circumstances, which raised a few institutions in their respective national territories to positions of privilege and superiority over other similar institutions either by virtue of the sole right to issue notes or by their special relations with the State.

Orthodoxies of Central Banking

The breakdown of the Gold Standard due to the intervention of the First World War gave rise, like all systems of antiquity in periods of eclipse, to two divergent currents of thought, one aiming at restoring it in its old form and the other seeking to replace it by

¹*International Currency Experience*, (League of Nations, 1944), page 98.

something more suited to the changed circumstances. In the hands of the former, central banking achieved a new dignity and status which it had certainly not possessed before. Not only was the "stability" of national currencies identified with the restoration of the international standard, but the successful maintenance of such a standard was pronounced to be conditional on the existence of central banks. Appeals were sent out from one international conference after another asking each country to establish a central bank of its own.

Even undeveloped countries were assured of something to look forward to. "Unless a country is under the influence of a neighbouring money centre, as is Ireland, or unless the local credit structure is insufficiently developed, as in India", wrote Kisch and Elkin, the most-quoted authorities on central banking in the inter-war period, "the arguments on the economic side for handing over the management of the currency to a Central Bank are convincing..... There is (however) much to be said for the view that the risk of prematurity in the creation of a central banking system should not necessarily be regarded as a decisive factor, because there is no influence so potent in the way of developing a credit system on sound and progressive lines as a well-founded central bank."¹

It would be true to say that, despite the fact that its foundations were laid so much earlier, central banking, as a concept, became defined and systematised only in these post-war years. Drawing inspiration from the prominent central banks already in existence, certain functions came to be accepted as essentially falling within their province and certain characteristics as fundamental to their integrity.² A classic statement on the functions of a central bank, made in 1926 by a Governor of the Bank of England, is illustrative of this. A central bank, he said, "should have the sole right of note-issue; it should be the channel and the sole channel, for the output and intake of legal tender currency. It should be the holder of all the Government balances; the holder of all the reserves of the other banks and branches of banks in the country. It should be the agent, so to speak, through which the financial operations at home and abroad of the Government would be performed. It would further be the duty of a central bank to effect, so as it could, suitable contraction and suitable expansion, in addition to aiming generally at stability and to maintain that stability within as well as without. When necessary it would be the ultimate source from which emergency credit might be obtained in the form of rediscounting of approved bills, or advances on approved securities, or Government paper."³

¹Kisch & Elkin, *Central Banks* (1928) page 12.

²De Kock, *Central Banking* (1939), Chapter I.

³*Report of the Royal Commission on Indian Currency & Finance* (1926) Evidences Q.14571.

To carry these functions out efficiently and disinterestedly, independence from political influences associated with Governments, and non-competition with other financial institutions in their commercial activities, were laid down as basic tenets of central banking.

Influence of Keynesian Thought

But while central banking was thus crystallising itself into a recognised "idea", the other current of thought, seeking to replace the gold standard by a more "scientific" system, was evolving new indices of monetary management. "The advocates of gold, as against a more scientific standard, base their cause", wrote Keynes in 1923, "on the double contention that in practice gold has provided and will provide a reasonably stable standard of value, and that in practice, since governing authorities lack wisdom as often as not, a managed currency will, sooner or later, come to grief. Conservatism and scepticism join arms—as they often do..... In truth, the gold standard is already a barbarous relic. All of us, from the Governor of the Bank of England downwards, are now primarily interested in preserving the stability of business, prices, and employment, and are not likely, when the choice is forced on us, deliberately to sacrifice these to the outworn dogma....."¹

In the following years there grew up a vast body of literature in monetary economics, with "business, prices and employment" as its watchwords. The new theories were not sufficiently developed when the attempt to restore the international gold standard finally met its ignominious end in the thirties, but the *management* of money had become an idea respectable enough for one to hold.

In 1936, Keynes published his *General Theory of Employment, Interest and Money*. In the decade that has passed since, not only has his terminology become the ground-work for further developments in theoretical exposition but the broad propositions for monetary management, as advanced therein, have themselves received wide acceptance. Commenting on the experiences of the inter-war period (1919—39), a report prepared under the auspices of the League of Nations says: "The endeavour to stabilize national economic conditions and to prevent or mitigate depressions must nowadays be accepted as a datum. After the experience of the recent past it is hardly necessary to add that the objective should be pursued and can really be attained only through measures acting directly on national income, investment and effective demand, and not through measures acting on the foreign balance....."²

¹J. M. Keynes, *A Tract on Monetary Reform* (1923), Chapter IV.

²*International Currency Experience*, (League of Nations, 1944), page 110.

These revolutionary changes did not leave unaffected the complexion of central banking. Even in the orthodox 'twenties it had been found necessary to stock its armoury with new methods of control, and so when the new schools of thought gained influence they had no difficulty in taking over central banks as potential instruments for enforcing policy according to their lights. The central banks became more and more drawn into close relation with their respective Governments, while the nature of their operations showed important changes in conception and emphasis.

As Parker Willis, who believed that there was not only a practice but also a theory of central banking, observed ruefully in 1936, "central banking technique tends more and more to rely upon direct control or intervention, and less and less upon the finer balancing of economic and financial forces, which was represented in the older theory of discount rate supervision or direction."¹ Again, "we may, therefore, with entire accuracy speak of the past two decades as a period during which, on one excuse or another, non-observance of the canons of central banking established during the pre-war period has been continuously defended; and in which, accordingly, not only the practice of central banking but.....its theory as well, have drifted away from the old moorings".²

Central Banking only a Technique

The fact, of course, was that there never was a theory of central banking, except in the eyes of those who mistook certain traditions for theory. Central banking has never been anything more than a technique of monetary management. If its operations were not so complex before the First World War it was because the problem of monetary management, as conceived at that time, was itself relatively simple. If the "independence" from the respective Governments was one of its basic tenets, it must be remembered that in the most formative stages of its development central banking was but a hand-maid of nascent capitalism. If, in spite of all this, central banks managed to gain the monopoly of note-issue, which, in turn, made them holders of the national reserves and the lenders of last resort and established the principle of non-competition with other banks, it was very largely a historical accident.³

Being only a technique it is essential that it should grow and change with the broader ideas on monetary management, and these ideas, as we have seen, are developing, both in the national and international spheres, away from easy assumptions about the natural harmony of forces and towards rational and scientific

¹Parker Willis, *The Theory and Practice of Central Banking* (1936), page 51.

²*Ibid*, page 43.

³Vera C. Smith, *The Rationale of Central Banking* (1936), p. 147.

control. "A technique which has not the ability to adapt itself to them must cease to be a technique.

This process of adaptation in central banking has been in progress in all parts of the world, partly as the outcome of clear insight as to the essentials of monetary management but, more often, just by trial and error. The enduring changes that have come over it in this way in the last few years remain yet to be analysed and recorded. No attempt to do this can be made here, but surely the direct control of banking systems through changes of reserve ratios, the nationalisation of central banks, etc., are not isolated deviations from a normal course but are themselves the vanguards of evolutionary central banking.

Need for Adaptation our Central Thesis

The need on the part of central banking to adapt and evolve in this manner, therefore, forms the initial proposition of this dissertation, on which the rest of the analysis is based. Until very recent times the functioning of central banks was confined to the relatively advanced economies of the world, and, consequently, the adaptational changes that took place were also with reference to the structural and institutional factors characteristic of these economies. But backward economic systems, by their very nature, throw up problems of a different kind. Hence, it is the study of the requisite modifications in the concept of monetary management and central banking, in the light of over a decade's experience in one such system, that constitutes our subject-matter.

The introduction of full-fledged central banking into India took place in 1935 with the establishment of the Reserve Bank. The date of inauguration alone suggests that while the new institution was not too late to be influenced by the orthodoxies of the 'twenties it was, in all likelihood, too early for the theoretical and practical developments of the 'thirties to make any deep impression on it. It will therefore be a mistake to expect presumptuously anything radical in its organisation or policy.

'General Theory' vis à vis Backward Economies

But in order to be in a position to differentiate the significant from the irrelevant and unimportant features, and to evaluate each adherence or departure from accepted tenets for what it is worth, it may be well to start by considering the implications of the most recent developments in monetary theory for the content of monetary management in a backward economy like that of India. This is the function of the following two chapters. In Chapter Two, which discusses the Keynesian *General Theory* in relation to backward economic systems, it will be suggested that the usual pre-occupation of monetary theorists with the phenomenon of

income fluctuations springs from the belief that changes in the tempo of investment activity are not only often the cause of initial disturbances in a system but also the main driving force in the subsequent movements of income in either direction ; further, such changes in investment are attributed by them to variations in the rate of interest caused by the impact of speculation on the sales and purchases of securities in the capital market. It is, therefore, not surprising that the function of monetary management is conceived to be essentially of a regulatory character, namely to maintain the rate of interest at a proper level by shielding it from speculative blasts.

But neither of the above two premises, from which this deduction is made, can be held to be strictly valid in the conditions of a backward economy. In the first place, while fluctuations of income are not necessarily unnoticeable under such conditions, one must be more circumspect about attributing them to changes in the tempo of investment activity. The movements of income here are mostly due to the high propensities of consumption of a population with low incomes, and the expenditures on investment play, by far, a minor role. Therefore, if the management of money, through the conditions of its supply, can be of any service at all, it will be, not by way of countering income fluctuations as such, but, in fact, to the extent that it enables investments to be undertaken on a larger scale, and prevents a paucity of them from becoming a drag on the growth of national income and the development of the economy.

The manner in which such assistance can be rendered becomes clear when we examine the other premise. The rate of interest in a backward system is not so closely related to speculative transactions in its capital market (which is often in an unorganised condition) as to changes in the demand for money from prospective entrepreneurs, *i.e.*, a rise in the rate of interest indicates more an increase in the demand from prospective entrepreneurs relatively to the available supply of money than any failure on the part of monetary supply to counteract the effect of some holders of existing securities unloading them on the market in return for cash. The way to lower progressively the rate of interest and stimulate investments on a growing scale in such a system is, therefore, by making the supply of "investment-finance" more responsive to demand. In the satisfaction of the demand for "investment-finance", expressed as well as potential, lies the crux of the problem of monetary management in a backward economy.

Chapter Three relates the foregoing observations to the structural and institutional factors in the Indian economic system, dwelling at length on those factors that tend to make the supply of money inelastic and irresponsive to demand. In this context, the

composition of money in the country, and the relatively insignificant share of bank deposits in it, are cited not merely as signs of a meagre banking system and undeveloped credit habits but also as important contributory causes, making more difficult and slow the extension of suitable agencies for introducing greater elasticity and responsiveness into the system. This approach raises, in turn, the question whether the extension of such agencies can rightly be left to proceed in the traditional way, but it may be as well not to anticipate, at this stage, too much of the discussion to follow.

Chapter Three also develops a line of thought, suggested by the discussion in the earlier chapter, which serves to reinforce the conclusion about the importance of "investment-finance" in a backward economy. It is contended that while it may seem that a high propensity to consume (which we have assumed as characteristic of the economically backward societies) can by itself provide the necessary force to create a state of "full employment", the absorption of unemployed factors is likely to stop abruptly and prematurely unless expenditure on investments proceeds apace. There is a semblance of full employment each time bottlenecks tend to thwart the further expansion of aggregate real income, and, therefore, in this sense, "full employment" can be reached at different levels of real income. But for employment to be truly "full", and for economic development to proceed at the fastest possible pace without deliberate curtailment of consumption, investment in the preceding stages must also have proceeded at a rate consistent with the consumption-expenditures, without being subject to any limitations. We are, of course, concerned here only with limitations relating to finance.

The above outline of Chapters Two and Three has been presented with a view to give the general reader, who is not familiar with modern monetary theory, some idea of the scope of the discussion therein. The chapters concerned are important in that they furnish the theoretical framework for much of the comments on the monetary policy of the Reserve Bank of India in the subsequent analysis.

Monetary Management in India

Chapter Four deals with the development of monetary management through the last century in India, with special reference to the period after the First World War and to the events leading up to the creation of the Reserve Bank of India. Chapter Five is devoted to a description of the main features of interest in the constitution of the Reserve Bank. These two chapters indicate essentially the conservative nature of the formative influences.

The main body of the thesis, reviewing the actual operations of the Reserve Bank, is covered by Chapters Six to Ten. Little

needs to be said at this stage by way of introduction to these chapters, except perhaps the reasons for dividing the material in the manner that it has been done. The chapter on the Loans and Discounts Policy has been given precedence over the others, because it concerns itself with measures devised by the Bank to allow direct access to the various financial agencies in the system and, therefore, relates to the attempts to create a machinery, which is selective in a very special sense, for distributing money and introducing greater elasticity in its supply. The following chapter deals with the operations which the Reserve Bank was free to undertake on its own initiative, irrespective of whether financial agencies came to it or not, and with their scope from the standpoint of the mechanism of monetary expansion and contraction. In other words, it treats the problem of the elasticity of the supply of money independently of that connected with its selective distribution. Chapter Eight examines the relations of the Reserve Bank with the market for long-term (including medium-term) loanable funds and discusses the extent of its influence over investment activity in the system, which, as pointed out earlier, constitutes the crux of the whole problem. Chapter Nine relates to a period which presented problems of a different kind ; it is devoted to a detailed analysis of the methods of deficit-financing employed during the war (1939—45), when the Bank was stripped of such policy-making powers as it had, and became, in effect, an agent of the Government working the monetary machinery in pursuit of objectives already laid before it. Though the analogy to problems raised by deficit-financing in planned reconstruction is not necessarily always correct, the lessons of this war-period do indicate, to some extent, the way in which they may be tackled. Lastly, in Chapter Ten, the arguments of the preceding chapters are outlined briefly and certain observations made regarding the role of central banking as a technique of monetary management in India.

One more word before we conclude. Since this enquiry is founded on the assumption that the balance of payments is an inadequate and unsatisfactory index for internal monetary management, the problems relating to foreign exchange fall outside its scope. They are referred to only in so far as they acted as part of the given data in the management of money in the period under review. Exchange problems belong to the wider sphere of international economics, and any attempt to solve them in the future will have to be through a rational co-ordination of the various national monetary systems, each, in turn, managed as rationally and scientifically as possible in the light of its conditions and requirements, rather than through persuading the national

systems to allow exchange movements to dictate how money should be managed internally, as was presumably the case in the nineteenth-century gold standard. Harmony between the units must be achieved not by submitting to the play of monetary forces but by conquering them, and it may be well to begin with the individual units.

II

MONETARY THEORY IN RELATION TO BACKWARD ECONOMIES

THE deductive method of analysis rests to some extent upon the use of assumptions, and this makes the validity of the conclusions drawn at each stage conditional on the validity of the preceding assumptions. Usually it is the custom to start with a host of assumptions to simplify the problem in hand, and then to drop them one by one to approximate the abstract model to reality. When this procedure is strictly adhered to in the formulation of theories their application presents relatively few difficulties. But frequently, not only do theories proceed from certain basic premises which it is considered unnecessary to question, because they conform to a given set of familiar structural and institutional facts, but when the theories are not sufficiently developed it becomes impossible to drop the assumptions without bringing down the whole superstructure. This is common in monetary economics, as in most social sciences. It is therefore proposed in this chapter to isolate those assumptions in modern monetary theory which, being drawn from features peculiar to advanced economic systems, are not applicable in the same way to the more backward economies.

The outward form of monetary theory today, as distinguished from its content, has been determined by its attachment to the phenomenon of income fluctuations. It has been assumed that the frequent under-employment of factors of production, identified with these fluctuations, has something to do with money and that it provides the most fruitful field for monetary management. We shall, for the moment, accept this premise as true, and proceed to examine how it has influenced monetary theory. It will then become clear that the usefulness of the available theoretical apparatus does not depend on its validity, and that it can be employed to indicate the scope of monetary action even in systems which do not ordinarily witness acute income fluctuations, provided the persistence of under-employment of factors of production is a feature of their economic condition.

The productive capacity of a society is registered in its aggregate real income, and any growth in one must be seen in a corresponding growth of the other. Aggregate money income may move differently from aggregate real income to the extent of any change in prices,

but it may be assumed, for the purpose in hand, that non-monetary influences are inoperative and that general prices do not change appreciably till a state of full employment is reached. So, up to this stage, we may take aggregate money income as the index of economic development, and go on to consider its components.

Members of an economic society are constantly involved in two activities which create money incomes for the other members, namely consumption and investment. Consumption refers to expenditure for the immediate satisfaction of wants, and investment to expenditure for the provision of consumable goods and services in the future. The surplus of money incomes over expenditures on consumption constitutes the money savings of the society, and, if there is no machinery for supplying money to supplement or replace the supply of savings, the question of bringing together the members who do the saving and those who want to do the investing must assume major importance. For given a stable level of consumption, the stability of incomes over a period will then depend on the relation between the demand for savings and the supply of savings.

Rate of Interest and Incomes

The "classical" economists like Say, Mill and Marshall, had no systematic theory of fluctuations. They noted the existence of the supply of savings and the demand for savings as two separate activities in the community, but they also believed that supply created its own demand. They did not, therefore, postulate a disequilibrium between the two as either a cause or an effect of income fluctuations. One of the first to introduce this possibility into economic analysis *in terms of monetary factors* was Wicksell, who suggested that the rate of interest, made effective at any moment by the credit system, might be different from the "natural" rate which would normally harmonise the processes of saving and investment. He affirmed the rate of interest as the balancing factor, but pointed out that what was important here was not the short-term rate but that obtaining in the market for long-term securities. In brief, his contention was that the influence of the credit system caused the effective long-term rate of interest to stray away from the level of normalcy and that the final impact was on income which was thereby disturbed from its equilibrium position.

Keynes, in his *General Theory* supported the Wicksellian emphasis on the long-term rate of interest, by tracing income fluctuations to changes in the stocks of securities (held by investors) on account of changes (actual or expected) in the long-term rate. But he did this by deposing the rate of interest itself from the central role, hitherto assigned to it, of balancing saving and investment. The rate of interest, he said, was not the price paid

for the use of savings, but the factor which equated the community's liquidity preference to the supply of money. Monetary action was, therefore, not limited by the supply of savings which would be drawn at the various rates of interest, but, instead, the rate of interest could itself be determined by changing the monetary supply with reference to the liquidity preference.

Keynes identified his concept of liquidity preference with the demand for money-hoards, and insisted that the hoards held for speculative purposes were alone of importance in the determination of the rate of interest. People demanded money for the purpose of "securing a profit from knowing better than the market what the future will bring forth" by way of changes in the rate of interest. There were two reasons why, in a given state of expectations, a fall in the rate of interest was likely to be associated with an increase in the amount of money so demanded. "In the first place, if the general view as to what is a safe level of r is unchanged, every fall in r reduces the market rate relatively to the 'safe' rate and therefore increases the risk of illiquidity; and, in the second place, every fall in r reduces the current earnings from illiquidity, which are available as a sort of insurance premium to offset the risk of loss on capital account, by an amount equal to the difference between the *squares* of the old rate of interest and the new".¹ The demand for money on account of the "transactions-motive" and the "precautionary-motive" were dismissed as unimportant, because they were irresponsive to any influence except to changes in economic activity and the level of incomes after they had occurred. Given the supply of money, the rate of interest was therefore a function of the "speculative" demand for money.

The practical significance of the Keynesian analysis, in contrast to those of the earlier theories, can be summed up as follows. In the "classical" view, fluctuations in the rate of interest could only be the result of changes in real factors like productivity and thrift, and the equilibrium between these was in fact attained in the market according to the laws of supply and demand. In Wicksell's analysis, the attainment of this equilibrium was impeded by monetary forces in the long term capital market, but if the banking system were neutral in its effect there would be no unnecessary fluctuations save those caused by shifts in productivity and thrift. But, according to Keynes's explanation, even if the banking system were "neutral", fluctuations could and did occur through changes in the "speculative" demand for money, originating in the uncertainty about future rates of interest, acting on the stocks of securities held by the investors. Monetary policy

¹J. M. Keynes, *General Theory of Employment, Interest & Money* (1936), page 170.

²Ibid., page 202 (r = rate of interest).

must therefore be directed at counteracting these fluctuations by meeting the variations in the demand for money springing from the capital market by appropriate variations in the supply of money. Thus it discounted the importance of the short-term market as an independent factor contributing to income fluctuations.

There has been considerable discussion on the Keynesian theory in recent years, by way of further analysis and in the form of attempts to effect a synthesis with the earlier theories. Essentially they centre around two problems : first, the factors determining the rate of interest, and second, its implications for monetary management in relation to the various short- and long-term markets. In referring to them here it will be the aim to underline the institutional factors which have influenced the choice of the explicit variables in all the two-dimensional systems of analyses, the limitations involved therein, and the consequent differences in interpretation to which even an accepted system of two given variables can give rise.

Keynes and the "Classics"

As shown by Oscar Lange, in one of the most important contributions since the publication of the *General Theory*, the apparent differences in the broad features of the "traditional" and the Keynesian theories of interest follow from their respective assumptions regarding the liquidity preference function.¹ In general terms, he says, the determination of the rate of interest is the result of mutual adjustment between three inter-related functions. Firstly, we have the consumption-function, the expenditure on consumption being a function of income and possibly of the rate of interest. Secondly, the expenditure on investment is a function of the propensity to consume and of the rate of interest. Thirdly, the liquidity preference function, which directly concerns us here, varies with income and the rate of interest, directly with the former and inversely with the latter. Lastly, he confirms that the expenditures on consumption and investment are always identical with total income.

Starting then from a position of stable equilibrium, a change in income, caused by a change in the expenditure on consumption and/or investment, will affect the rate of interest through the liquidity preference function (assuming a fixed amount of money). These shifts in income and in the rate of interest will, in turn, influence the consumption and investment function in the next unit period, and cause a further change in income and in the rate of interest. A position of stable equilibrium will ultimately be

¹Oscar Lange, *The Rate of Interest and the Optimum Propensity to Consume* *Economica*, Volume V No. 17, February 1938.

established when the rate of interest settles down at a point at which the expenditure on consumption and investment together equals the income which is necessary for the rate of interest to be at that point.

Now, according to Lange, the Keynesian theory presents the one extreme case, where the demand for money is inelastic to income and infinitely elastic to the rate of interest. It follows that since the liquidity preference function is inelastic to changes in income, and the rate of interest is determined independently by the interest-elastic demand for money, changes in the expenditure on consumption and investment will register themselves on the level of income without affecting the rate of interest at all.

On the other hand, the traditional theory of interest assumed that the demand for money was inelastic to interest and infinitely elastic to income. The interest rate was knocked out of the liquidity preference function, and the demand for money was correlated to income. The rate of interest at a given level of income would therefore be determined by the other two functions at the point at which the expenditure on consumption and the expenditure on investment together equalled income. In other words, transposing expenditure on consumption to the other side of the equation, the rate of interest would be stable when income minus consumption, *i.e.*, saving, equalled investment.

Lange comes to the conclusion that the Keynesian and the "traditional" theories of interest are the two limiting cases of a more general theory in which the nature of the liquidity preference function is left unspecified. It may be more income-elastic than interest-elastic, or more interest-elastic than income-elastic, or equally elastic to income and interest. The forces that determine the rate of interest, and the form of monetary management, will vary correspondingly. Moreover we have to take into account the other two functions relating to Consumption and Investment, if one is to get a complete picture.

There is, however, implicit in this fascinating presentation an important assumption regarding the nature of liquidity-preference. It assumes that the demand for money in a community changes only on two counts : first, with a change in income, and second, with a change in the rate of interest. The former, which constitutes the 'active' cash balances, is income-determined, and the latter, which constitutes the 'idle' cash balances is income-determining. It follows that monetary management can influence incomes only by operating on the latter. In the "limiting" case of the Keynesian theory, where changes in income have no effect on the liquidity preference function, it would be adequate if the supply of money is altered to counteract fluctuations in the demand for idle balances. Evidently it is suggested that, in the other "limiting"

case of the "classical" theory, where the cash balances are a direct function of income and insensitive to the rate of interest, changes in the supply of money would be powerless to affect incomes in the subsequent stage.

Significance of "Investment-Finance"

But there is, in fact, a third variable in the liquidity-preference function, which is income-elastic as well as interest-elastic, and present even in the two "limiting" cases discussed above. This is the amount of money demanded by entrepreneurs in the initial stages of planning investment. It will be obvious that even if there is no speculative demand due to changes in the rate of interest, actual or expected, there will still be money demanded for planning investment, which will vary with the marginal efficiency of investment, and which must be met by changes in supply.

In his later contributions, Keynes admitted this by referring to the possibility of a "temporary" demand for money, arising from the planning of investment activity, which he called "investment-finance".¹ The significance of the concession, implied in this concept of investment-finance, has been pointed out by Robertson. In the earlier scheme of Keynes, "active money" could only grow as a result of a previous growth in income, so that the banks could only operate by increasing 'idle money'; yet at the same time it was apparently contemplated that, even if 'idle money' were zero, there would still be some (unexplained) way for total income to be increased and the rate of interest to fall. Commonsense suggests that the natural way for this to occur is by the banks performing the primary function of banking, i.e., lending money to people who want to use it....."²

The reason why Keynes did not mention investment planning as an independent factor in the liquidity-preference function was simply that he assumed the existence of a broad and sensitive credit system. Explaining what he meant by investment-finance, he said: "A pressure to secure more finance than usual may easily affect the rate of interest through its influence on the demand for money; and unless the banking system is prepared to augment the supply of money, lack of finance may prove an important obstacle to more than a certain amount of investment decisions being on the tapis at the same time. But 'finance' has nothing to do with saving. At the 'financial' stage of the proceedings no net saving has taken place on anyone's part, just as there has been no net investment. 'Finance' and 'commitments to finance'

¹Keynes, *Alternative Theories of the Rate of Interest*, *Economic Journal*, June, 1937.

²D. H. Robertson, *Alternative Theories of the Rate of Interest: a Rejoinder*, *Economic Journal*, September, 1937.

are mere credit and debit book entries, which allow entrepreneurs to go ahead with assurance."¹

The omission of investment-finance in the original Keynesian schematism, and its grudging acknowledgment later, may be compared to an assumption made in the traditional analyses which Keynes himself was the first to correct. The "classical" theories assumed that the supply of savings would create its own demand, and that there could be no over-saving, because "in a civilised community with an organised investment market" nobody would care to hoard *i.e.*, "no savings would be held for any considerable time in the form of idle cash, except by ignorant people of primitive instincts whose resources would be a negligible fraction of those of the community".² Keynes not only showed why, and to what extent, idle balances might be demanded even in a "civilized" community, but raised the discussion of the problem from the level of "savings" to that of "money". In his anxiety to establish the fact that the supply of money was not subject to the same limitations as the supply of savings, Keynes, however, went to the other extreme and asserted dogmatically that the demand for money would draw forth the necessary supply.

The assumption of a broad-based and responsive credit system was perhaps a natural one to make in the advanced conditions with which Keynes was familiar. But it is worthwhile to remember that on it was dependent not only his treatment of investment-finance but the importance of the basic distinction he drew between the supply of savings and the supply of money. In an economy (or in a sector within an economy) which has not the advantages of a credit system the supply of money and the supply of savings are, more or less, the same thing. Under these conditions it is only an increase in the supply of savings that can provide the wherewithal for further investment and increased output. In brief, it is no more true to say that "'finance' has nothing to do with saving."

Our discussion of the Keynesian theory of the rate of interest thus reveals a number of propositions of an essentially institutional character, which are not necessarily valid in an economy not so advanced as that postulated by them. On the side of the supply of money it was assumed, firstly, that the community in question was familiar with the use of credit instruments, and secondly, that there existed a broad organisation of agencies to distribute "finance" to those who needed it for purposes of investment. These, in turn, formed the bases of its more fundamental premise that, on the side of the demand for money, the only factor of

¹ Vide Keynes, *Economic Journal*, June, 1937.

² R. G. Hawtrey, *Capital and Employment*, p. 165. Quoted by Thomas Wilson, *Fluctuations in Income and Employment* (1942) page 8.

significance in the determination of the rate of interest were the hoards^a held for speculative purposes. These "institutional" assumptions should be borne in mind when the analysis is extended to explain the phenomenon of a structure of interest rates.

Why a Structure of Interest Rates?

The Keynesian theory of interest was not strictly a multiple-rate analysis, at any rate in its original form. The rate of interest was defined as "the 'price' which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash," the implication being either that there was only one rate, or alternatively, that the other rates were related in a more or less unchanging and predictable manner to this unique rate of interest. Obviously it was the latter that was meant. "Corresponding to the quantity of money created by the monetary authority", explained Keynes, "there will, therefore, be *cet. par.* a determinate rate of interest or, more strictly, a determinate complex of rates of interest for debts of different maturities.....If the monetary authority were prepared to deal both ways on specified terms in debts of all maturities, and even more so if it were prepared to deal in debts of varying degrees of risk, the relationship between the complex of rates of interest and the quantity of money would be direct."¹ The coveted position of the "unique" rate of interest, which was what he called *the* rate of interest, was offered to the rate on long-term gilt-edged bonds.

The vagueness in Keynes's treatment of the interest rate structure can be traced to his account of how the long term rate (*i.e.*, the rate on gilt-edged bonds) was itself formed: "The rate of interest is a highly conventional, rather than a highly psychological phenomenon. For its actual value is largely governed by the prevailing view as to what its value is expected to be. Any level of interest which is accepted with sufficient conviction as likely to be durable *will* be durable; subject, of course, in a changing society to fluctuations of all kinds round the expected *normal*."² He did not explain how the idea of the "normal" was born.

The extension of the Keynesian scheme to cover the omissions was undertaken by subsequent writers. They started from the premise that a potential investor was free to hold his resources in any market, and deduced from this that the current long-term rate must depend on the expected future short-term rates. In the words of Kaldor, "the existence of a long-term loan market implies the existence of a series of forward markets in short-term loans. And since the forward price of anything, if uncertainty is present, must be below the expected price this implies that the

¹ Keynes, *General Theory*, page 205.

² *Ibid.*, page 203.

current rate of interest on loans of any particular duration, must be above the average of expected future short-term rates, over the same period..... This also answers the objection that the expectation-theory leaves the structure of interest-rates, current and expected, hanging in the air by its own bootstraps."¹

This approach can be broadened a little further to get the explanation for the whole "complex of rates" in a system. The rate of interest in each market may be conceived as tending to equalise the advantages of holding each deferred claim as compared with any other claim, including a present claim on cash, after a process of weighing the particular characteristics and qualities of each deferred claim. That is, "the general money and capital markets may be thought of, conceptually, as broken down into a number of small diversified markets, each characterized by the terms and qualities of the claims traded in that market. The various loan markets, though distinct, are not, however, wholly unconnected with one another..... And, of course, the markets are connected with the rest of the economic system in the manner shown by Keynes, that is through cash demand."²

Its Implications

This logical extension of the Keynesian analysis modifies, or rather, elaborates to some degree the relationship between changes in the speculative demand for money and changes in the supply of money which is its central theme. As already mentioned, the liquidity-preference function, built on the two variables of income and the rate of interest, suggests that speculation in long-term securities, which takes the form of frequent shifts from the holding of such securities to the holding of cash and *vice versa*, upsets the essential harmony between the flow of money into and the demand for money from the capital market, and thereby causes income fluctuations. Apparently the alternatives before an investor are either to hold a security or to hold cash. But our analysis of the structure of interest-rates brings out the nature of the inter-dependence between the various markets for money, and proves that the choice before an investor is not between holding a particular deferred claim and holding cash, but between holding that deferred claim and another which he considers either more or less "liquid." When the outlook for a particular kind of security is dull (*i.e.*, the rate of interest on it is expected to fall), the proceeds from the sales of that security do not necessarily go into hoards but may as well go into other assets of shorter duration and carrying a smaller risk premium. Similarly when the outlook for a security is

¹N. Kaldor, Speculation and Economic Stability, *Review of Economic Studies*, Volume III. No. 1., October, 1939.

²D. W. Lusher, The Structure of Interest Rates and the Keynesian Theory of Interest, *Journal of Political Economy*, Volume L, No. 2., April, 1942.

“bullish”, the cash for the purchase of that security may come not only from previously existing hoards but also from the liquidation of short term assets.¹ In substance, an impulse originating in one security is transmitted by stages to securities in other levels, till the security carrying the highest risk premium and having the longest maturity period as well as the security carrying the least risk and with the shortest maturity period (*i.e.*, cash) are both affected.

The assumption here is that complete mobility exists between the markets for different securities. The closer the integration between them the quicker will be the transmission from one end to the other. But it is obvious that the assumption of complete mobility is untrue to even the most advanced systems. In a given institutional organisation, some markets may be closely geared together but not all the markets to the same degree. Keynes was undoubtedly aware of this, and hence his assertion, quoted above, that “if the monetary authority were prepared to deal *both ways on specified terms* in debts of all maturities, and even more so if it were prepared to deal in debts of *varying degrees of risk*, the relationship between the complex of rates of interest and the quantity of money would be direct.”²

The problem of monetary management, however, becomes still more complicated when we take into account our earlier conclusion that the rate of interest in a market is not necessarily determined by the supply of money in relation to the interest-elastic demand for it, and that the chances of its being so determined in an undeveloped economic system are negligible. Everything depends on the other variables in the demand for money and on the various institutional rigidities in supply. It is conceivable that a change in the rate of interest for one type of security may therefore leave the other interest rates altogether undisturbed. To cover such extreme cases of insulated rates of interest, the Keynesian precept that the monetary authority should be prepared to deal both ways on specified terms in debts of all maturities and risk premiums will have to be expanded considerably in scope. The maintenance of a reasonably stable relationship between the quantity of money and the “complex” of rates of interest (representing the “complex” of markets for money) will then require no less than that the monetary authority should remove the institutional rigidities in the supply of money in relation to the demand for it in each market, if necessary by the direct assumption of responsibility for the different market organisations. In other words, monetary management in an undeveloped economy has to operate on broader and

¹S. C. Tsiang, A Note on Speculation and Income Stability, *Economica*, Volume X, No. 40., November, 1943.

²*Vide* page 17 (my italics).

more direct lines than in a more developed one in order to achieve the same objects.

All a Matter of Loanable Funds

In concluding the remarks on the principles relating to the supply of money, which we have built around the phenomenon of the rate of interest, it may be well to mention that a theory of interest, if it is to be useful for analysis, must satisfy two conditions : (a) it should reveal, or help to reveal, conceptually, the factors which affect the rate of interest in a dynamic situation, and (b) it should explain the fact of a structure of interest rates and what it implies in terms of the organisation of the various markets for money. There is probably some advantage in a theory which emphasizes a few chosen factors which are prominent in a system, but we have also seen how misleading such theories can be when applied to systems of a different kind. From this point of view, the most satisfactory theory of interest evolved so far is that which conceives of the rate of interest as determined simply by the demand for, and the supply of, *loanable funds*. Behind these two direct determinants there can be a host of other forces like the marginal efficiency of investment, the propensity to consume, the speculative demand for idle balances, the demand for balances on account of investment-planning, the breadth and elasticity of the credit system, etc. All these may exercise influence in varying degrees in a given situation, but the theory as such makes no effort to specify them or weigh them. For this reason it is a kind of "multi-dimensional formula" and may be criticised on the ground of lacking precision.¹ But when the picture confronting one is itself vague, as it is in most undeveloped countries, a theory which suggests faithfully the multitude of influencing factors is preferable, for clear thinking, to one which places unbalanced and misleading emphasis on a chosen few.

This brings to an end one part of modern monetary theory, the part concerned with problems that can be described as strictly monetary. The other part, though no less important, deals with aspects which are, in content, non-monetary. It assumes an initial shift in the level of incomes, and concentrates on factors which will determine the ultimate shift in total incomes as a result of it ; the rate of interest meanwhile is also assumed to remain constant. In other words, the liquidity-preference function, whose direct relevance is to the rate of interest, is brushed aside in favour of the consumption and investment functions, which are then considered, not in terms of how they act on or react to the liquidity-preference function but in terms of their relationship to income.

¹W. Fellner and H. M. Somers, *Alternative Monetary Approaches to the Interest Theory*, *Review of Economic Statistics*, February, 1941.

Relation between Consumption and Income

The consumption-function, by definition, has two variables, income and the rate of interest *i.e.*, the expenditure on consumption will change with a change in income and possibly also with a change in the rate of interest. Since we have assumed that the latter is fixed, we are concerned here only with the effect of a change in income. The investment function, by definition, has also two variables, namely the expenditure on consumption and the rate of interest. The nature of this functional relationship is reserved for later discussion. It is sufficient to repeat here that the expenditure on consumption and the expenditure on investment must always be equal to total income.

Taking the consumption-function, it is assumed that every act of consumption creates an income of equal value simultaneously.¹ If, then, there is an initial increase in income, of which $\frac{1}{n}$ is spent, and if the successive income recipients spend the same proportion of their increase in incomes as the original income recipient, it will be obvious that by the time the impulse has worked itself out total incomes will have increased in the following fashion :

$$\frac{1}{n} + \frac{1}{n^2} + \frac{1}{n^3} + \frac{1}{n^4} + \dots = \frac{1}{1 - \frac{1}{n}}$$

Divested of its mathematical form, it means that the higher the marginal propensity to consume the greater will be the ultimate increase in incomes. But the actual result will depend not only on the validity of the assumption that the marginal propensity to consume remains unchanged throughout but also on the time-lag between successive acts of consumption.² The possible lack of uniformity in individual marginal propensities has always been recognised in analyses of this nature, but the importance of time-lags has often failed to receive the same attention. As a result, the differences in the rates of income propagation between a system in which incomes are received and spent on a weekly basis and another in which the relevant period is greater or less (say, six months or a day) are left unstressed.

¹This need not of course be true. The receipts of a retail shop-keeper from the purchases made by his customers, for instance, do not necessarily constitute his income. It may be that the receipts induce him to place further orders on the wholesaler, or alternatively the receipts may just compensate him for what he had previously paid for. In the first case there is net investment, and, in the second, there is disinvestment neutralising the earlier investment. The cases where an act of consumption does not create an income of equal value simultaneously, therefore, need to be treated under the investment function.

²Fritz Machlup, *Period Analysis and Multiplier Theory*, *Quarterly Journal of Economics*, Vol. LIV., November, 1939.

As for the effect of consumption expenditure on investment, there is an initial problem to be faced *i.e.*, whether the latter is an increasing or a decreasing function of the former. The older theorists were inclined to believe that saving was the basis of investment and that, therefore, the less the expenditure on consumption the greater would be the expenditure on investment. But the 'Under-consumptionists' supported the diametrically opposite view that the inducement to invest was derived from consumption, and hence that the higher the amount spent on consumption the greater would be the expansion in investment.

Concept of Optimum Propensity

After pointing out that if all income is saved and none spent on consumption there can be nothing to invest that saving in, and that if, on the other hand, all income is consumed and none saved there will be no surplus left for investment, Oscar Lange offers a solution to discover the optimum propensity to consume (*i.e.*, the point at which investment is maximised) with the aid of his 'general' theory of interest. He accepts the premise that investment is derived from consumption, and that an increase in consumption will increase the marginal efficiency of investment and *vice versa*. But an increase in consumption will also raise the rate of interest through the liquidity-preference function, and a decrease lower it. Since the relevant inducements to invest include the expenditure on consumption as well as the rate of interest, investment will be maximised when "the marginal rate of substitution between the rate of interest and total income as affecting the demand for liquidity is equal to the marginal rate of substitution between the rate of interest and expenditure on consumption as inducements to invest."¹ At this point the propensity to consume is at an optimum.

This concept of the optimum propensity to consume is acknowledged to be valid only with reference to a given quantity of money. But Lange assumes, as we have already noted, that in the "limiting case" of the traditional theory of interest (*i.e.* where the demand for money is elastic only to changes in income) the supply of money has no influence on the rate of interest. A strict application of his analysis of the 'optimum' therefore leads to the conclusion that here the condition that an increase in investment requires a decrease in consumption is absolute and unchangeable. But even this limitation does not in fact exist because the variables in the liquidity-preference function, as postulated by Lange, are over-simplified. The assumption that there is no demand for idle balances does not prove either that

¹Oscar Lange, *The Rate of Interest and the Optimum Propensity to Consume*, *Economica*, Volume V, No. 17., February, 1938.

changes in consumption expenditure will be directly transmitted to the rate of interest or that the supply of money is ineffectual in altering it. When the supply of money is infinitely elastic to changes in demand, an increase in the propensity to consume always encourages investment whatever the nature of the liquidity preference function, while, on the other hand, if the supply of money is dependent on savings a fall in consumption expenditure does not by itself guarantee increased investment.¹ In any case, taken independently of the rate of interest (in conformity with our original assumption that the rate of interest remains constant), investment is an increasing function of the expenditure on consumption.

The Investment-Function and the Keynesian "Multiplier"

Given a particular system, what we are then interested in is the ratio between a net increase in consumption expenditure and the expenditure on investment induced by it. This ratio, which is known as the "relation", would show, if it could be determined, how such an increase in the expenditure on consumption would increase income through the investment function. The process involves two steps: first, the amount of investment goods necessary to produce the consumers' goods in increased demand, and second, the increase in the outlay on investment goods necessary to produce this extra amount. The principle of acceleration of derived demand, as usually stated, covers only the second. If the investment goods in question possesses high durability and is capable of turning out each year a certain amount of consumption goods for several years to come, then according to this principle, the increase in the expenditure on consumption goods in a limited period (say a year), which induces the construction of this investment goods to be undertaken, will involve expenditure several times larger than itself. Thus, as Halm points out, "the degree of acceleration depends on the ratio between new demand and replacement demand and therefore on the durability of the investment goods. If we assume smaller replacement figures, that is, greater durability of the equipment in question, the fluctuations of capital goods production tend to become more violent. A durability of zero, on the other hand, would eliminate the working of the principle of acceleration."²

¹As an interesting side-light to this conclusion may be quoted a remark of Malthus in his *Principles of Political Economy*. After extolling consumption as the propelling force in investment, he says: "Parsimony, or the conversion of revenue into capital, may take place without any diminution of consumption, if the revenue increases first". Unfortunately he did not elaborate on how this initial increase in revenue could take place.

Second Edition (1836), page 326.

²G. N. Halm, *Monetary Theory* (1942), page 410.

But the elimination of acceleration will not necessarily reduce the "relation" to zero. It only makes it smaller. As long as an increase in the expenditure on consumers' goods induces investment, whether in durable or non-durable goods, the "relation" will have a positive value. But, in the more backward economic systems, in which not only is any kind of acceleration to the "higher stages of production" often absent, but the amount expended on investment is itself small compared to what is spent on consumption the value of the "relation" is likely to be negligible. This is sometimes expressed by saying that "inelasticity or lack of sufficient magnitude in the underlying technological schedule of capital productivity or efficiency" ¹ impedes investment.

There are thus three factors which, given a fixed rate of interest, determine the ultimate shift in total incomes as the result of an initial change: (a) the marginal propensity to consume, (b) the value of the "relation", and (c) the time-lags and adjustment-periods in the intermediary stages. In a system in which the value of the "relation" is high, even a marginal propensity to consume of modest proportions can (under certain conditions to be examined below) cause violent changes in income. For, an increase in the expenditure on consumption will produce a multiplied increase in the expenditure on investment, and the income so created will lead to further increases in consumption and investment. If the marginal propensity to consume as well as the "relation" have high values, the results of small changes in income will be explosive, except in so far as they are tempered by the time-lags and adjustment-periods.

In the *General Theory*, Keynes covered both the consumption and investment-functions in his analysis of the multiplier—a fact which is not often noticed and is therefore the cause of considerable confusion. For, though he defined the multiplier in terms of only the marginal propensity to consume, he did introduce some important qualifications when drawing the distinction between his "investment multiplier", k , which was the ratio of the increment of total income associated with a given increment of aggregate investment, and Kahn's "employment multiplier", k' , which was the ratio of the increment of total employment associated with a given increment of primary employment in the investment industries. "There is no reason in general," he said, "to suppose that $k = k'$. For, there is no necessary presumption that the shapes of the relevant portions of the aggregate supply functions for different types of industry are such that the ratio of the increment of employment in the one set of industries to the increment of demand which has stimulated it will be the same as in

¹Howard S. Ellis, *Monetary Policy and Investment*, *American Economic Review*, Supplement, Vol. XXX, No. 1., March, 1940.

the other set of industries. It is easy, indeed, to conceive of cases, as, for example, where the marginal propensity to consume is widely divergent from the average propensity, in which there would be a presumption in favour of some inequality between $\frac{\Delta Y_w}{\Delta N}$ and $\frac{\Delta I_w}{\Delta N_2}$,¹ since there would be very divergent proportionate changes in the demands for consumption-goods and investment-goods respectively."² He went on to add that in order to simplify the problem he would assume that $k = k'$.

The assumptions in Keynes's multiplier theory were set out even more explicitly in a later passage. "The multiplier," he explained, "tells us by how much their employment has to be increased to yield an increase in real income sufficient to induce them to do the necessary extra saving, and is a function of their psychological propensities"; and then, in a footnote, that "in the more generalised case it is also a function of the physical conditions of production in the investment and consumption industries respectively."³

Income Fluctuations in Undeveloped Systems

But though Keynes did not altogether ignore the complexities of the investment-function, as is at times alleged, the procedure he employed forced him to abandon the marginal propensity to consume as an instrument of analysis in favour of the average propensity to consume when he had to apply the multiplier theory to the more undeveloped economic systems. The formula that the greater the marginal propensity to consume the greater the multiplier might seem to lead, he said, "to the paradoxical conclusion that a poor community in which saving is a very small proportion of income will be more subject to violent fluctuations than a wealthy community where saving is a larger proportion of income and the multiplier consequently smaller. This conclusion would, however, overlook the distinction between the effects of the marginal propensity to consume and those of the average propensity to consume. For whilst a high marginal propensity to consume involves a larger *proportional* effect from a given percentage change in investment, the *absolute* effect will, nevertheless, be small if the *average* propensity to consume is also high."⁴

Though this was an acknowledgment of the importance of the magnitude and elasticity of "the underlying technological schedule of capital productivity or efficiency,"⁵ the appeal to averages

¹Y_w represents the total real income, N the total employment, I_w the primary investment, and N₂ the primary employment in the investment industries.

²Keynes, *General Theory*, pages 115—116 (my italics)

³Ibid., page 117.

⁴Ibid., page 125

⁵Vide, page 24.

placed the problem in the wrong perspective, and Keynes did not really succeed in proving what he set out to prove, that "whilst the multiplier is larger in a poor community, the effect on employment of fluctuations in investment will be much greater in a wealthy community, assuming that in the latter current investment represents a much larger proportion of current output."¹ What was relevant was not the average consumption or the average investment but the marginal consumption and the marginal investment. In other words the comparison between two systems must be made in terms of the marginal propensity to consume and the "relation."

The following table showing the inter-action of the marginal propensity to consume (α) and the "relation" (β) in two systems, one approximating to a poor undeveloped country and the other to a rich and developed country, has been compiled in the manner indicated by Samuelson.² It is assumed that, to start with, there is an increase in income by one unit, caused by an increase in consumption or in investment (say, through deficit financing by the government), and that an increment of the same value is injected into the system at each successive unit period. We then take System A in which $\alpha = 1.0$ (i.e., the consumption in any unit period is equal to the full amount of the income in the previous unit period) and $\beta = 0.1$ (i.e., a "time increase" in consumption of one unit will result in induced investment of one-tenth of that unit); in System B, on the other hand, $\alpha = 0.5$ and $\beta = 2.0$. The sequences of income in the two systems will be as follows :

	$\alpha = 1.0$ $\beta = 0.1$	$\alpha = 0.5$ $\beta = 2.0$
Period	System A	System B
1	1.00	1.00
2	2.10	2.50
3	3.31	3.75
4	4.64	4.13
5	6.10	3.48
6	7.71	2.03
7	9.48	0.90

¹Keynes, *General Theory*, page 126.

²Paul A. Samuelson, Inter-actions between the Multiplier Analysis and the Principle of Acceleration. *The Review of Economic Statistics*, Volume XXI., No. 2., May, 1939.

The formula of calculation is derived as follows :—

National Income at time 't', Y_t , can be written as the sum of three, components :—(1) government expenditure, gt , (2) consumption expenditure C_t , and induced private investment, It .

i.e., $Y_t = gt + C_t + It$

Now the assumptions are :—

$$C_t = \alpha Y_{t-1}$$

$$It = \beta (C_t - C_{t-1}) = \alpha \beta Y_{t-1} - \alpha \beta Y_{t-2}$$

and $gt = 1$

Therefore,

$$Y_t = 1 + \alpha (1 + \beta) Y_{t-1} - \alpha \beta Y_{t-2}$$

It is clear from this that the effect on total income of a constant and continuing level of deficit expenditure (consumption or investment) is much greater in System A than in System B. This is not to say that it will always be so. If α is taken as 0.8 and β as 4.0, then, in the seventh period, income in System B will be 1459.6.¹ But it proves that when there is inter-action between the consumption and the investment functions, what determines the magnitude of the impact on total income of an initial increment is not the *average* propensity to consume or the *average* inducement to invest but the relative values of the propensity to consume and the "relation" *at the margins*.

There is, however, one feature about the two models, introduced above, which is worthy of notice and which probably indicates the *raison d'être* of Keynes's argument. In System A the increase in total income is brought about largely by the operation of α , and the contribution of β , though positive, is small. In System B, on the other hand, α produces a dampening effect, and the total income will tend to gather speed only when the positive effect produced by high values of β more than counteracts this dampening effect. But if β is to have a value even as great as one, it means that an increase in consumption increases the marginal efficiency of investment in relation to the current rate of interest so much that an increase in investment of the same value is worthwhile. Under these conditions there is ground for the presumption that a change in the rate of interest effected through the liquidity-preference function will produce substantial changes in income. On the other hand, when violent changes in consumption causes little or no change in investment, it suggests also insensitivity of a high degree on the part of investment to changes in the rate of interest. The effect of the rate of interest on consumption is at least problematical, if not altogether absent. Influence can therefore be brought to bear on the level of income here only by direct consumption or direct investment by the authority concerned. In other words, monetary management, in the usual sense, will by itself be inadequate.

Summary

It must be clear from the discussion in this chapter that the system of monetary analysis associated with the name of Keynes can lend itself to considerable adaptation. At first its main conclusions may seem rather rigid, but on closer study it becomes obvious that they are really more suggestive than dogmatic. While indicating the factors that were likely to determine the efficacy and scope of monetary management Keynes fitted them into a

¹Ibid., Samuelson, Table 2.

scheme of his own, but his methods of choice and stress do not preclude the insertion of suitable modifications. What we need to be clear about are the special institutional considerations which shaped his own outlook. There can be no greater danger than using his terminology and accepting his conclusions without due allowance being made for these.

Some general suggestions have been put forward in this chapter with the object of making the Keynesian approach to monetary problems more acceptable from the point of view of a backward economy. An examination of their practical implications is postponed to the next.

Of all the basic propositions which form the ground-work of Keynes's *General Theory*, his analysis of the rate of interest is perhaps more distinctly coloured than any other by assumptions drawn from a limited field of experience. He was inclined to view changes in the rate of interest as almost entirely attributable to speculative deals in the share markets. He attached no importance to those elements in the demand for money which appeared to him to find quick and almost automatic responses in supply because, as he explained, they were irrelevant to changes in the rate of interest. Thus the demand for money arising from the transactions and precautionary-motives was firmly set aside, its impact being believed to fall on and to be met from incomes previously earned. From this procedure it followed that only those elements in the demand for money, against which such automaticism and ease in supply could not be taken for granted and therefore required special initiative on the part of the monetary authority, were worth considering in any discussion of variations in the rate of interest.

We have no quarrel with the method as such. But, in arriving at the conclusion that the "speculative" demand for money was the sole determinant of the rate of interest, the assumption seems implicit that there were no other relevant motives which might influence the demand for money and yet not meet with a ready response from the side of supply. This was perhaps a legitimate assumption to make in the advanced systems which Keynes had in mind. But it is indefensible when we deal with a backward economic system which has not the requisite financial and credit structure.

Under the special conditions which one may be justified in presuming here, it is often the case that whatever the nature of the current and expected structure of interest rates a considerable volume of money-demand from prospective entrepreneurs remains always unsatisfied. In fact it is only a small section of potential investment that is able to secure the necessary finance. Accordingly the effective rate of interest in the economy as a whole can be

influenced more by managing the supply of money with reference to this vast sector of unsatisfied demand than by concentrating on the relatively narrow sector to which is confined all the speculative transactions.

This is not to suggest that every investment plan that is hatched should receive financial aid or even that finance is the only bottleneck in the way of economic development. What is meant to be stressed is that a very large proportion of sound investment in backward economies, perhaps larger than many of us like to think, is frustrated because the necessary finance is not available on reasonable terms. Nothing substantial can be done to remedy this by merely operating on the speculative demand for money which is essentially a phenomenon of the organised share markets. The main function of monetary management must therefore be to make provision for the supply of money to respond adequately to all reasonable demands for "investment-finance".

The difference in emphasis here from the Keynesian analysis must be clear. But as long as a suspicion lingers that the scope of monetary management is itself limited in an undeveloped system, any difference in emphasis in the mere technique of it cannot evoke much interest. We tend to judge the scope of monetary management in terms of its effect on incomes in the economic system, and unless this can be shown to be reasonably profound the whole discussion becomes reduced to one of purely theoretical value.

In this connection certain observations made by Keynes in the course of his analysis of "the multiplier" are likely to give the impression that the rate of income expansion (or contraction) will be small in a system in which the average propensity to consume is high. So the conclusion will follow that whatever may be done in the management of money, its ultimate effect will be more or less imperceptible in a backward society subsisting on a low level of incomes.

However the rate of movement of incomes in a system is not determined by the value of its average propensity to consume. What we are interested in is the intensity with which an initial increase (or decrease) in incomes will cause the absorption (or release) of productive factors in the system. This absorption (or release) will take place according to the values of the propensity to consume and the propensity to invest at the margin. That is to say, if an increase in income stimulates considerable increase in consumption, and if this increase in consumption in turn stimulates a fair volume of investment, then the ultimate effect on the absorption of productive factors, by the inter-action of the two, will tend to be large. It has nothing directly to do with the average propensities of either consumption or investment.

It will be clear, for instance, that even if only half of a society's income is normally spent on consumption and the other part is devoted to investment, the ultimate effect of an initial increment of income on aggregate income will tend to be small if the value of the marginal propensity to consume is nil. Similarly, even when the greater part of a society's income is devoted to consumption, the impact of a disturbance will be fairly powerful if the value of the marginal propensity to consume is high and if the value of the marginal propensity to investment is not too small.

In other words the relevant factor determining the amplitude of income fluctuations is the inter-action between the propensity to consume and the propensity to invest at the margin. If monetary management can influence the propensity to invest at the margin it can also profoundly influence the economic development of the system.

However there is one difference in the scope of monetary management in a backward system. When, as is usually the case in an advanced system, a small increase in consumption expenditure stimulates a relatively large increase in investment expenditure, it suggests a degree of sensitivity in the latter which should give the monetary authority, through the indirect control over the rate of interest, a guiding role in the direction and tempo of income movements. But when such sensitivity is lacking, the monetary authority will have much less sway over investment activity, and over income movements in general, unless it adopts more direct methods of control.

III

THE STRUCTURAL AND INSTITUTIONAL FACTORS IN MANAGEMENT

"The understanding of the working of the monetary system, whatever else it involves, involves also an accurate knowledge of all those processes and mechanisms which are what they are because of a set of specific institutional and structural facts, and which would be very different if these institutional and structural facts were different from what they are."

—A. W. Marget, American Economic Review,

December 1942

THE last chapter was devoted to a general discussion of the assumptions in modern monetary theory which are derived from a restricted range of institutional and structural facts, and of the conclusions the same systems of analysis indicate when a different set of assumptions, which are more realistic from the point of view of backward economies, is substituted instead. Using this as the background, it is now proposed to outline those factors that appear to be relevant in demarcating the objectives and techniques of monetary management in India.

It is a truism that monetary management has no meaning in a barter economy which possesses various units of account but has no generally accepted medium of exchange. There is nothing remarkable in this as such. But it raises the question as to what are the tests which must be applied in gauging broadly the effectiveness of monetary management with reference to a given economy. In answer to this it would be roughly correct to say that monetary management presupposes that the flow of money and the flow of goods (and services) in the economy concerned, are two entities that are neither identical nor completely separate. If the two flows are identical then, obviously, to regulate one with the aid of the other presents no problem, while if they are totally separate such regulation is impossible. In other words, it has to be established that the flow of money and the flow of goods (and services) are essentially inter-dependent variables.

It is easier to show that the two flows are not completely autonomous, i.e., that each does "not pursue its own course independently of the other, than to show that they are not one and the same thing. For, if the system concerned uses some form of money—metallic, paper or otherwise—for the exchange of goods and services, then obviously there must be various points of contact between the flow of money and the flow of goods (and services).¹ This is a condition which is fulfilled in most economies, however backward.

But to prove that they are not identical entities it is necessary to indicate how they can in fact fall out of step. This can happen if there is not only a generally accepted medium of exchange but also a generally accepted store of value. A few people put away more money for later use, and the current flow becomes correspondingly smaller. It is clear that this too does not require a very advanced community. It is well to remember that the distinction between the flow of money and the flow of goods and services was in fact first drawn by the Physiocrats of eighteenth-century France. Since they did not postulate an agency for creating money they insisted, and quite correctly, that money should not be withdrawn from "production-stimulating" circulation. Dupont, for instance, said explicitly that while the introduction of money had facilitated saving it had also made possible the hoarding of what was intended to serve as a medium of exchange. Such non-spending of money income ("thesaurisation"), he pointed out, would impede capital formation.²

The question whether management of money makes any sense at all in an economy of India's maturity is therefore not really seriously in issue. The practical problems are what kind of management, and to what purpose? In attempting to resolve them we should consider the nature of the composition of money in India, the agencies in charge of its distribution and, above all, the modes of economic activity that are, or are likely to be, most sensitive to manipulations in the supply of money.

Composition of Money

The composition of money in a country is a reflection of the general character of the demand for it. It shows the extent to which the community has progressed in the use of credit, and incidentally throws light on how the variations in the demand for

¹J. J. Spengler, The Physiocrats and Say's Law of Markets, *The Journal of Political Economy*, Volume LIII., Nos. 3 & 4, September and December, 1945.

Spengler remarks: "It is likely that had the Physiocrats lived at a time when banking facilities were better developed than in mid-eighteenth century France they would have put less stress upon their theory of hoarding and have emphasized, instead, factors causing fluctuations in monetary velocity and in the quantity of other than 'hard' mediums of exchange".

money can, and should be, met. When studied over a period of time it gives an indication of the functional relationships that exist between the different forms of money, and it can also be interpreted so as to bring out the manner in which the liquidity-preference of the community tends to express itself under changing conditions.

A study of the composition of money in India is handicapped by the fact that there are no accurate and comprehensive statistics on some of the important items of circulation or on the national income of the country to which they must be related. Reliance has therefore to be placed on such information as is at hand and on the estimates that have been made by various people.

Barter is, of course, of no significance in Indian economic life today. Even metallic currency, which was once the main medium in use, has in the last thirty years been diminishing rapidly in popularity due to a process of substitution by more "capital-saving" media of circulation. According to the latest, and most reliable, estimate of rupee coins in circulation, they fell from Rs. 238 crores in 1913 and Rs. 364 crores in 1920 to Rs. 158 crores in 1935.¹ Offsetting this contraction of metallic circulation, the use of paper notes increased from Rs. 60 crores in 1913 to Rs. 160 crores in 1935. By the 'thirties, therefore, notes were satisfying the needs of the people as much as, if not more than, metal coins.

The growth of deposits in India has also been rapid and, in volume, makes a better showing than even the paper circulation. The total private deposits of banks rose from under Rs. 100 crores in 1913 to nearly Rs. 250 crores in 1935, the demand deposits on the latter date being over half the amount. But these figures should be treated with caution, as neither the aggregate volume of deposits nor the high percentage of the demand deposits are true indices of the popularity of bank deposits as media of exchange in the country. In the first place, the habit of making deposits is confined to a very narrow sector of the population in the cities and towns. Secondly, the banks pay interest on demand deposits, and so they are treated by a large section of the depositors, more as investments for bringing in a steady income, than as temporary accumulations of working capital finding a convenient resting place in the vaults of the banks. The growth of deposits has therefore been a secular trend indicating the expansion of the banking system, and not always a measure of the extent to which they were used for making payments. It is worthy of notice that the variations in the ratio of demand deposits to total deposits have been largely the effect of the relative movements of short- and long-term rates of interest.² As media of exchange, coins and notes still hold

¹P. C. Mahalanobis, *A Statistical Report on the Rupee Census, Report on Currency and Finance, 1940-41* (Published by the Reserve Bank of India), Appendix I.

²Muranjan, *Modern Banking in India*, pp. 107-111.

the field for the large majority of the people, though deposit money is increasingly used and plays an important part in the transactions of certain sections of the people.

Reaction to Economic Fluctuations

In cheque-using systems, not only are metallic coins and paper notes of negligible importance and bank deposits the most popular media of exchange, but there is very often a certain consistency in money-using habits. The case of Great Britain is in point. In the inter-war years the national income of Britain as well as its internal demand for liquidity varied, as is well known, within wide limits, but the use of cash (*i.e.*, coins and notes) nevertheless maintained a steady relation to economic activity.¹ Between 1925 and 1939, a period marked by violent and widespread disturbances in the system, the ratio of currency to national income fluctuated within no more than 6.9 per cent. and 8.0 per cent. But the ratio of clearing bank deposits to national income, while keeping fairly steady between 1925 and 1930, was subject to more drastic variations, indicating that while in normal times the movements in the volume of deposits were guided by the level of activity they became in more disturbed conditions an expression of the increased liquidity.

In India there are two major forms of economic fluctuations, the seasonal and the long-term, and the country's liquidity-pattern can be studied from the manner in which its composition of money reacts to these two forms. Under the seasonal fluctuations the various items follow more or less faithfully the trend of economic activity. The months October to April constitute the busy season, and May to September the slack season. The following figures show the average deviations of the Silver Rupee and Paper Currency Circulations, from season to season and month to month respectively, computed by the method of moving averages.²

SILVER RUPEE CIRCULATION

(RS. CRORES)

	Jan. to Mar.	April to June	July to Sept.	Oct. to Dec.
India (1920—37) ...	+39	-1.75	-6.51	+3.15

¹Money and Income, *The Economist*, May 4, 1946.

²M. S. Adiseshiah, *Seasonal Variations in the Demand for Money*, Unpublished Doctorate thesis of the London University.

ACTIVE PAPER CURRENCY CIRCULATION¹

	Jan.	Feb.	Mar.	April	May	June
India (1901—34)...	+3·8	+3·8	+2·6	+1·1	—1·2	—3·1
	July	Aug.	Sept.	Oct.	Nov.	Dec.
India (1901—34)	—6·0	—4·8	—2·4	—0·3	+0·7	+5·7

To judge from the clearing bank figures the use of bank deposits as media of exchange is also affected by seasonal fluctuations to some degree, but the correlation is a little haphazard. Monthly statistics on the actual deposit liabilities of banks, available as from 1935, suggest that the variations in demand deposits between the busy and slack seasons are not of a higher order. Taking everything into account it is probably correct to say that while the total demand deposits of the banks did not themselves register seasonal fluctuations, the velocity of circulation of a section of them was affected.

In the long-term fluctuations, the different items of money reveal not even a trace of that remarkable degree of functional relationship noticed in Britain.

	Rupee Coins ²	Total Private Deposits of Banks ³	(Rs. CRORES) Average 'Active' Note Circulation ⁴
1921 ...	360	227	152 (1921—22)
1923 ...	356	198	157 (1923—24)
1925 ...	345	211	163 (1925—26)
1927 ...	327	212	163 (1927—28)
1929 ...	282	204	163 (1929—30)
1931 ...	241	197	153 (1931—32)
1933 ...	213	221	157 (1933—34)
1935 ...	158	245	164 (1935—36)

¹Ibid., Active Circulation is defined as gross circulation minus the holdings of the Government Treasuries and the Presidency Banks. The increased deviations from the moving average of active circulation show, therefore, the increased popularity of notes among the general public.

	Jan.	Feb.	Mar.	Apr.	May	June
Average Deviations for 1901—11 ...	+0·4	+0·8	+0·4	+0·2	—0·6	—1·4
Average Deviations for 1901—34 ...	+3·8	+3·8	+2·6	+1·1	—1·2	—3·1
	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average Deviations for 1901—11 ...	—1·9	—0·9	—0·1	+0·5	+0·4	+0·8
Average Deviations for 1901—34 ...	—0·6	—4·8 ²	—2·4	—0·3	+0·7	+5·7

²Mahalanobis, *op. cit.*

³Muranjan, *Modern Banking*, p.36.

⁴*Reports on Currency and Finance* (Published by the Reserve Bank).

The main reason is obviously that they are swamped by the secular trends. But with the decline in the circulation it is not improbable that rupee coins are approximating slowly to the position that coins and notes (*i.e.*, 'cash') together occupy in Britain, being used less and less as stores of value and more and more as media of exchange. On the other hand, since the use of deposit money is restricted to small sections of the population, we may guess that its Indian counterpart is the paper note, being a medium of exchange as well as a store of value to the common people.

What these Characteristics Imply

The special characteristics of the composition of money in India have certain interesting implications. Firstly, the more a community is acquainted with the use of credit and the less insistent it is on cent per cent liquidity (*i.e.*, on holding cash) the greater are likely to be the quantitative effects of a marginal unit of legal tender on subsequent debt creations. But since notes form the most popular medium of circulation in India the elasticity of the supply of money rests largely on the elasticity of note-issue, which means that the monetary authority in charge of note-issue has to expand and contract its liabilities on a larger scale than if bank deposits were more commonly used. Secondly, in so far as the proportion of incomes kept in the form of cash is not maintained at a reasonably stable level, the control of the deposit liabilities of banks through the supply of cash reserves loses considerable strength and precision. In Britain, if an increase of cash reserves is manipulated by some means or other, the net effect can be expected to be an increase in the reserves of the banks after such absorptions by the public as may meanwhile have become necessary (if at all) for their day to day transactions. In India, on the other hand, an increase in the liabilities of the monetary authority by way of cash may be absorbed by the public itself with little or nothing percolating into the coffers of the banks unless the increase is effected through direct dealings with the banks. Thus, changes in the supply of money not only require greater exertions on the part of the monetary authority, but, to the extent that it is desired to influence the ordinary banks quickly and effectively through their cash reserves it can be done only by establishing direct relations with them.

There is also a more important side to it. When the large majority of the people demand actual cash for all transactions and do not use the cheque, the commercial banks are, by the nature of their business, restricted in their clientele to those who understand credit and are familiar with the use of cheques. For the banks earn their profits by their ability to create liabilities which are six or seven (or more) times their cash reserves, but this power derives in turn from the condition that the creditors of the

banks demand in cash, at any moment, only a fraction of what is due to them. If, instead, they insist on being paid in cash every time an advance is made by the banks, it is obvious that instead of being able to multiply their liabilities several times on the basis of a marginal unit of legal tender they will be able to do no more than lend out just what they have received in that form. There is therefore an inherent bias in commercial banking against the less credit-conscious sections of the population. If the commercial banks do have any dealings with these sections they are usually confined to the collection of such deposits as they are willing to leave with them (usually as savings deposits), and thus lay themselves open to the charge (very commonly heard) that they drain funds away from the undeveloped areas to assist areas which are already developed.

It is not a mere coincidence that no country has as yet developed an advanced system of deposit banking without going first through the stage where the function of banks was to issue notes of their own. Scotland was one of the first countries in the world to develop, what is called, "the banking habit" on an extensive scale, and yet for twenty years after the foundation of the Bank of Dundee it had no deposits at all, but subsisted mainly on its note issue; once it began to gain deposits in 1792 progress was rapid. In England, till the 'thirties of the last century deposits were treated by contemporary observers as such a minor phenomenon that all the controversies raged on questions of note circulation. In Canada, the transition from a pluralistic to a unitary system of note issue ended only a few years ago.

Walter Bagehot gave the explanation for this as early as 1873 in his *Lombard Street*. "The real introductory function which deposit banks at first perform," he said, "is much more popular, and it is only when they can perform this more popular kind of business that deposit-banking ever spreads quickly and intensively. This function is the supply of paper circulation to the country..... the best way to diffuse banking in a community is to allow the banker to issue notes of small amount that can supersede the metal currency. This amounts to a subsidy to each banker to enable him to keep open a bank till the depositors choose to come to it..... The reason why the use of bank paper commonly precedes the habit of making deposits is very plain. It is a far easier habit to establish. In the issue of notes, the banker, the person to be most benefited, can do something. He can pay away his own 'promises' in loans, in wages or in payment of deposits. But in the getting of deposits he is passive..... The credit of the banker having been sufficiently advertised by the note, and accepted by the public, he lives on the credit so gained years after the note-issue has ceased to be very important to him."

¹Walter Bagehot, *Lombard Street* (1873), Fourteenth Edition, Chapter 3.

Problem of Banking Development

It is important to recognise how the contradictions between undeveloped liquidity-patterns and the question of banking development were solved in countries where they have since developed. But to return to a pluralistic system of note-issue (wherein each bank would have the right to issue its own notes), in order to reap the advantages that were found, as a matter of historical experience, to ensue from it, would not only be impracticable but would neglect the changes that have taken place in the rationale of "deposit-banking" since the days of Bagehot.

In his time there were severe limitations on the expansion of the supply of money through the issue of notes by the Bank of England, so that any considerable increase in the volume of loanable funds depended on mobilising the savings of the people through the collection of deposits. As Bagehot himself declared, in praise of the English banks on comparison with Continental banks, ".....the English money is 'borrowable money'.....A million in the hands of a single banker is a great power; he can at once lend it where he will, and borrowers can come to him, because they know or believe he has it. But the sum scattered in tens and fifties through a whole nation is no power at all; no one knows where to find it or whom to ask for it."

The older ideas, which considered paper notes to be money in a sense in which bank deposits were not, continue to persist in certain quarters and often act as inhibitions in monetary management. But it is generally appreciated now that the effect of an expansion in the supply of money would not necessarily be any different if it were accomplished through the medium of note-issue from what it would be if it were through bank deposits. Preference for the one or the other can be justified only with reference to the liquidity-pattern in question. It follows that, given willingness on the part of the monetary authority to make available as many notes as are required, the volume of loanable funds, in a system in which notes form the main item of circulation, is not dependent for its growth on the development of deposit-banking. Rather, the problem is reversed: banks are now desirable not so much as 'feeders' without which the 'reservoir' of loanable funds would be the poorer, but as 'canals' flowing out of a self-generating 'reservoir' to give the widest possible distribution to the loanable funds.

This means that while, in the more developed credit systems, banks may be what they are today after evolving gradually from the position of 'feeders' to that of 'canals', there is no

logical reason, in the light of modern ideas, why banking development should be condemned to proceed along the same circuitous route. As distributive agencies, all that should be required of them are efficiency and trustworthiness so that any impulse from the top might be faithfully transmitted to the lowest layers of the system.

To sum up, the composition of money in India does not impose any absolute limitation, as such, on monetary management, but it makes it necessary to give it a re-orientation to suit its special features. Firstly, since notes are the main media of exchange, changes in the supply of money will require operations to be undertaken on a larger scale than if the use of deposits were more in vogue. Secondly, due to the instability in the liquidity-pattern, the control of the banks in existence through their cash reserves will be even less effective than elsewhere unless the changes are effected by directly operating on them. Thirdly, since the preference of the vast majority of the people for payment in 'cash' tends to make the collection of loanable funds, rather than their distribution, the motive-force behind the extension of banking to the less developed areas, the organisational problems of the monetary system will have to be reviewed afresh.

Existing Agencies of Distribution

By far the larger part of the supply of money in India is the direct responsibility of what is rather compendiously termed "the indigenous sector of the money market." This sector comprises of thousands of money-lenders all over the country, and of indigenous bankers located in the urban areas. These two categories are themselves not homogeneous. Among the money-lenders are land-owners, merchants, agriculturists as well as a number of people who casually take to it for supplementing their income. Almost all money-lenders, professional or non-professional, are small capitalists who do not accept deposits but rely on their own resources. Unlike the money-lenders, indigenous bankers do accept deposits, but they have no direct contacts with the villages. Though their business approximates to banking, indigenous bankers are also often traders and merchants themselves.

It cannot be disputed that, within the boundaries of this "indigenous sector", the supply of short-term loanable funds for the large mass of producers in the rural areas is more or less limited to the savings of the money-lending capitalists. Theoretically speaking, the rate of interest is therefore determined by the age-old formula relating to the demand and supply of savings, and 'finance' and 'commitments to finance' (to use Keynesian terminology) are inevitably circumscribed by the relative

magnitudes of these two. Secondly, money-lenders are virtual monopolists and are free to quote almost any rate they like to their customers. This power is greater when they have a hold on the prospective borrowers through past debts unpaid, which, in most cases, are ancestral debts of long standing. The curious disparities in the rates quoted by money-lenders were reported by an official of the Government as early as 1869. "I know of no rational explanation," he observed, "of the extraordinary difference between the rates of interest prevailing in localities perhaps only a few miles from one another and in which, so far as we know, the risks are alike; why in one village the cultivator should pay 50 per cent, and in another 100 per cent, and yet there is nothing unusual in this..... These great discrepancies cannot be reconciled by considerations of the disparity of risk, and the variation in the supply of capital for investment."¹ In this connection it is also worthwhile noticing that the rates actually realised by money-lenders on their loans are often much below what they quote. The balance is used to inflate the nominal value of the debt, to impress on the illiterate borrower the extent of his obligations, and to get out of him the maximum amount possible each year (including, if he is a farmer, the right to buy from him his produce on favourable terms at the harvest season when prices usually reach their lowest levels).

Superimposed, as it were, on this heterogeneous mass of financiers is "the organized sector of the money market". It is composed mainly of the commercial banks, the co-operative banks, the land mortgage banks and the stock exchanges. While the commercial banks have expanded in number and strength over the last half-century they have rarely ventured out into the rural areas. The multiplication of branches has taken place, not by extension into the villages but by growth within the towns themselves. The commercial banks deal in short-term loans and also make considerable investments in Government and other public securities, but they have not so far undertaken the long-term financing of industry as one of their functions. The co-operative credit institutions, in spite of years of campaigning, have touched only a small fringe of the population. In the villages they have failed to oust the money-lender. Of the reasons suggested in explanation, the following two are probably the most important: firstly, the principle of unlimited liability on the members has discouraged villagers of means from joining the societies, and secondly, the refusal to combine the marketing of agricultural produce, and the financing of the other credit requirements of the people with the supply of credit for strictly productive purposes, makes the money-

¹Report of the Officiating Commissioner, Seetapoor Division, to the Secretary to Chief Commissioner, Oudh, No. 388, dated 26th January, 1869—Oudh, *Selections from Records*.

lender, who provides all these services, by far the most useful agency for the common man. As land mortgage banks, who are supposed to be the suppliers of long-term finance, have also not spread widely to the villages, no substantial challenge has so far been thrown to the money-lenders who supply funds on short- as well as long-term.

In "the organized sector", there are no big investment houses or finance corporations for long-term loanable funds. When fairly large sums are required for business purposes it is necessary to seek assistance from such Managing Agencies as may be interested. Issues are then made to the public, and the important shares dealt in the stock exchanges. There are two main stock exchanges, one in Bombay and the other in Calcutta, but, apart from Government securities there are only a few shares and debentures which find a market at all times. The buyers of securities are the public, and certain institutional investors like commercial banks and insurance companies. The smaller investors either leave their funds as time deposits with the banks or invest them in Post Office Savings Bank accounts or Post Office Cash Certificates. Considerable sums, though on a diminishing scale, are also attracted into the bullion markets.

Interest Rates and the Supply of Money

The scattered, disorganised and undisciplined structure of the Indian money markets has no better index than the wide range of interest rates quoted in them. The indigenous bankers usually never charge more than 20 per cent, but for money-lenders this is probably nearer their minimum rate. The rates quoted by them may be anywhere between 20 and 150 per cent. Even in "the organized sector", there is no functional relationship in interest rates. The deposit rates of the commercial banks vary from locality to locality and from bank to bank. The rates quoted by them for loans and advances are even more variable. The Imperial Bank, the biggest of the commercial banks, has a discount rate for three months' bills, but even this has no functional relationship with the same bank's Advance Rate for demand loans. The rates on the three months' Treasury Bills of the Government follow still another course. The yields of the various securities on the Stock Exchanges have a slightly greater organic unity, though even here it is far from complete. When securities have a fairly high degree of shiftability, the buyers tend to move from one to the other if they think there is any advantage to be derived from doing so, and thus help to forge a certain relationship in the yields of these competing securities. Naturally it applies only to those few gilt-edged and first class industrial securities which are easily marketable.

Within the existing market structure it is clear that the supply of money has only the remotest connection with the vast "complex".

of interest rates. The problem of the distribution of money in India cannot therefore be solved by merely opening up a few sluices to remove minor immobilities in the flow of funds. It is not proposed to discuss any concrete proposals at this stage, but it may be mentioned that in devising an adequate technique of distribution the following details should be borne in mind. Firstly, in the context of the general insensitiveness, the existence of a few rates which are sensitive is a serious limitation on any technique which relies on the transmission of impulses between the relatively insensitive rates by making the original expansions and contractions of money correspondingly bigger. In other words, the heterogeneity of the markets makes it essential to have a selective mechanism of distribution. Secondly, in view of the composition of money, the changes in supply that will have to be made in order to influence the more undeveloped markets (which are, by far, the majority) will have to be of vastly greater proportions than in the case of the more developed ones. The distributive mechanism must have the necessary elasticity to carry these loads quickly and effectively, without at the same time denying to the monetary authority the power to supervise the ultimate purposes to which they are put. Lastly, as emphasised earlier, though such mechanisms of distribution have developed in the past in other countries *via* the growth of deposit banking, there is no rational ground on which dependence on the same slow and circuitous process can be justified today.

These problems, which would arise in the actual technique of monetary management must now be related to the broader question of its scope. The discussion has so far been centred on one side of what we called in the last chapter the "liquidity preference function", namely the means by which changes in the demand for money, actual and potential, can be met. We shall now turn to consider the forces that determine the rate of movement of incomes in India and the points at which the supply of money may exert a determining influence on them. We shall then be in a position to venture a few observations on the scope of monetary management in India.

Investment and Amplitude of Income Movements

In view of the low level of income *per capita* in India there is strong ground for the presumption of a high marginal propensity to consume and a corresponding disinclination to devote very much of increments of income for purposes of investment. Theoretically, as noticed in the last chapter, this does not necessarily mean that the generation of incomes will proceed with less intensity than if the marginal propensity to consume were smaller and the amount devoted to investment were higher. But the multiplication of incomes through the operation of the marginal propensity to

consume alone assumes the existence of stocks of unused resources within the system which can be brought into employment without further investment. If this margin is small, and production is inelastic beyond a certain point at the given level of investment, further expenditure on consumption, without corresponding increase in investment for enlarging the productive capacity, will induce merely a rise in the prices of the goods concerned.

If the system is not a closed one, the propensity to import may increase and cause, in the first instance, a "leakage" in the series of re-spending starting from the original increase in consumption. Provided the system is a large one in relation to the other systems, the "leakage" will be able to induce a re-echoing effect through increasing the demand for exports from the system and thus assist in filling itself. But if this does not happen and the propensity to import goes on increasing without corresponding expansion in exports, it will become necessary, at some stage or other, to remove the source of the rising consumption expenditures. Therefore, in any case, the expansion of *real* incomes, through the sole operation of the marginal propensity to consume will tend to be limited by the elasticity of production at the given level of investment.

It is obvious that this elasticity is exceedingly small in agricultural production, which forms the backbone of India's national income. Firstly, with the small peasant farm as the unit, the costs of production consist essentially of the living expenses of the farmer and his family and of certain fixed dues to the landlord or the state. According to well-known economic laws, the high ratio of these supplementary costs to the prime costs tends to keep production at all times more or less at the maximum level possible under the given conditions, leaving very little margin for expansion. Secondly, even if there is such a margin, it is difficult, for technological reasons, to regulate production with precision from month to month or even year to year. This may be countered by the device of holding stocks but in the backward conditions of distribution in India this practice has naturally not received wide acceptance.

As for the non-agricultural industries in the economy, the elasticity of production must be deemed to be higher, and further, in view of the unemployment and under-employment of resources considerable increases in production may be possible without expanding the outlay on investment. But even allowing for these factors, the productive capacity of the Indian economy is limited compared to the propensities of consumption, and, for that reason, any expansion of real incomes by relying solely (or even largely) on the high marginal propensity to consume cannot proceed very far. A state of "full employment" will be reached after a relatively small increase in real incomes.

It follows that while the main dynamic force in the movements of income in India is the propensity to consume, determining as it does the velocities of these movements, the key to the *range* of movements of real income lies with investments designed to increase productive capacity. In advanced economic systems it is usually assumed that the supply of money is infinitely elastic to the demand for purposes of planning investment, and therefore it is taken for granted that the outlay on investment at "full employment" is at its optimum and that the real income corresponding to it is the highest that can be had. But this is an assumption which cannot be made with regard to India. As we have already seen, an adequate system for the distribution of money does not exist for there to be even an approximation to such elasticity. Since the propensity to consume is high the savings of the people also tend to be on the small side. Under these conditions, monetary factors will (and, in fact, do) act as formidable obstacles thwarting the stimulus to investment and causing a state of "full employment" to be reached at levels of real income much below the maximum that may be attained.

The existing organisation of financial agencies in India may seem to affect growth of incomes adversely in another way also. Through the exorbitant interest charges, the money-lenders and indigenous bankers absorb such increments of income as befall the vast mass of the producers, and since their own propensities of consumption are usually far lower than those from whom they extract these charges the net result is to reduce the value of the marginal propensity to consume. In view of the fact that the money-lenders and the indigenous bankers are, at present, the suppliers of 'investment-finance', it is, of course, difficult to say whether the 'positive' contribution they make in this way is greater or less than their 'negative' influence exerted through the marginal propensity to consume.

Summary

We are now ready to bring together our scattered observations regarding the objectives and techniques of monetary management in India in a systematic form :

1. Since the level of incomes is low the marginal propensity to consume tends to be high. In so far as the fluctuations of income are caused by the operation of this factor monetary management, by itself, will be ineffective in controlling them.

2. Of the amounts spent on investment annually, only a very small proportion goes through the organised markets,

and so the "interest-elastic" demand for idle balances, which would have provided a medium of management, is of negligible importance.

3. Though the propensities of consumption constitute the main dynamic force in income fluctuations and would seem to have sufficient "leverage" power for causing intense movements of income, the range of fluctuations in real income is limited by the elasticity of production. One of the most potent factors that may impede investment designed to increase this elasticity is the lack of 'investment-finance.' Under the existing organisation of financial agencies in India, the supply of loanable funds is extremely restricted.

4. In view of the "liquidity-pattern" in India, elasticity of loanable funds must mean largely the elasticity of note-issue.

5. The motive-force in the development of "deposit-banking", as usually known, is to collect loanable funds rather than to distribute them, and the undeveloped credit habits tend to restrict its scope. But, given a central institution for providing the necessary elasticity of note-issue, there is no rational ground for placing so much emphasis on the collection of deposits. The organisational problems of monetary management concerned with the distribution of loanable funds, therefore needs reviewing afresh.

6. The heterogeneity of the existing market structure makes it essential to have a selective mechanism of distribution if it is wished to ensure that the funds are employed for the purpose for which they are supplied.

IV

THE DEVELOPMENT OF MONETARY MANAGEMENT IN INDIA

BEFORE the 'sixties of the last century India was largely a country of self-contained village units, with a loosely knit pattern of production and exchange, and very much insulated from external economic influences. This meant that, though the insight into the intricacies of credit was in many ways much in advance of the economic organisation of the times, the inter-dependence between money and economic activity was not so obvious or so important as it became later. Money lenders and indigenous bankers had their part to play, but such discipline as they maintained arose not from a recognition of their importance in the modern economic sense but from a philosophy of life that ruled the village system in a comprehensive way.

The first significant event that altered this state of affairs was the introduction of a unified coinage system into the existing multitude of vastly different coinages. This was followed, and in a few cases slightly preceded, by the establishment of a number of modern banks, the most famous of which were the Presidency Banks of Bengal, Bombay and Madras. The Presidency Banks were at first confined in their business dealings to a very narrow productive and commercial sector, as they were really no more than the financial branches of the East India Company's main offices. Nevertheless they had the right to issue notes, and the withdrawal of that right in 1861 strikes one as the beginning of monetary management in India.

Early English Influence

What first suggested the withdrawal of bank issues in favour of notes issued by the Government is not clear, but it is not unlikely that the action drew its inspiration from the British Bank Charter Act of 1844 and from the subsequent trend towards the separation of currency from banking business in many other countries. In this connection it is interesting to note that the first proposal for a Government currency favoured a proportional reserve system, and that it was made without prejudice to the establishment of a large banking corporation "adequate to the requirements of the trade of the country and through which all business of the Government

may be transacted.....which might in fact represent the banking department of the Bank of England.”¹ Neither of these found any favour with the authorities in London. They pressed for the adoption of the “sound principle” of the fixed fiduciary issue,² and to avoid any suggestion of currency being linked with banking they would not consent even to the use of the Presidency Banks as agents of the Government in respect of currency.³ Sir Charles Wood, one of the architects of the British Bank Charter Act of 1844, was at this time the Secretary of State for India, and we may guess that his influence was considerable in these matters.

There were a few voices of dissent. One of them was Cooke who wrote a book in 1863⁴ on Indian banking and commented as follows: “What India requires greatly, more than a paper currency is a sound system of Banking so as to break down the enormous internal exchange and the usurious rates of interest, levied by the shroffs, as well as to aid Government currency. We are far from under-rating the convenience of a sound paper currency and the economy of capital, when freely confided in, which it affords; but we attach greatly more importance to the extension of Banking.”

In compensation for the monetary loss accruing to the Presidency Banks from the withdrawal of the right of note-issue the Government agreed to give them the use of its idle balances. There was no restriction placed on the use of funds up to a certain specified limit, but amounts held in excess of this had to be held in cash or invested in Government securities. However, when this arrangement failed to work well in an emergency in 1863, the Government decided to relax even these conditions and to let the Banks use the balances as they thought fit, subject only to the obligation to produce them at any time on demand. Thus began the practice of Government balances being used for the discounting of commercial bills.

But in 1874 there was another breakdown, and thereupon the Government of India insisted on a complete revision of the system. It rejected the suggestion of the Secretary of State that, while withdrawing its balances from the Presidency Banks, the Government should aid the money market by entering it and by competing in the banking business. Taking a very unilateral view of its operations, it believed that it would be assuming the ideal role of neutrality by not placing funds at the disposal of the banks.

¹Financial Letter from the Governor-General, 29th December, 1859 No. 2 Minute by Mr. Wilson.

²Financial Despatch from the Secretary of State, 26th March, 1860.

³Letter dated 16th September, 1862 from the Secretary, of State to the Governor-General. Financial No. 158.

⁴Cooke, *The Rise, Progress and Present Position of Banking in India* (1863).

"It is not, in my opinion, the business of the Government of India to finance Indian trade," observed Lord Northbrook, the Governor-General at the time, "it is the business of commerce to finance Indian trade."¹

A good solution of the problem would have been to amalgamate the three Presidency Banks into one strong central bank with a single dependable reserve, as suggested by Mr. Dickson in 1867,² and to entrust it with the responsibility of performing all the transactions of the Government on its behalf. But the Government was quite complacent, and the result was the inauguration of the Independent Treasury in 1876.

Emphasis on Currency Problems

The failure to grasp the importance of developing and encouraging the wider use of credit, of mobilising capital or of economising in the use of it meant in practice that right from the 'sixties there was an exaggerated emphasis on currency problems—at first in preference to and, later on, in neglect of the banking problems. Towards the closing years of the 'eighties this narrow approach received a fresh impetus from a development that was fast taking shape.

The widespread use of silver coins as currency and, to a lesser extent, the adoption of the fixed fiduciary principle produced a state of affairs in which the only element that could introduce elasticity into the system was silver bullion, either silver from hoards or silver imported. Being divorced from the former by their structural narrowness the commercial banks were dependent almost completely on silver imports. There was thus a close correlation between the Bank Rate of the Presidency Bank of Bengal and the annual imports of silver.³ Towards 1890 the international price of silver in terms of gold began to fall, and India, being still on the silver standard, attracted the depreciating metal to the point of surfeit. While this brought down the interest rates to a low level, it also weakened the exchange rate and made the external obligations of the Government heavier in real terms. A Committee, appointed to consider the situation, recommended the closing of the mints to further coinage of silver, with a view to introducing the Gold Standard in due course. This set afoot a gigantic controversy as to whether India should go back to silver or adopt the Gold Standard.

¹Evidence before the Indian Currency Commission of 1898.

²*Papers relating to the Establishment of a Central Bank*, published by the Government of India in 1913. Mr. Dickson was the Treasurer of the Bank of Bengal.

³This is clear from a chart submitted to the Fowler Committee in 1898 and printed in the Appendices to its Report. A large proportion of the silver imported was received into the mints.

The controversy as such is outside the purview of the present discussion. But the closing of the mints, the subsequent rise in the exchange value of the rupee, and the accidental evolution into a Gold Exchange Standard produced a re-orientation in the approach to monetary problems which is of some interest. The changes were so momentous that they provoked a re-statement of the accepted tenets of Indian monetary practice and a healthy exploration into new possibilities. The theoretical speculations of this period therefore provide the background to the experiments in semi-central banking that followed the end of the Great War.

The closing of the mints to the coinage of silver gave rise to two conflicting tendencies : (a) the rise in the nominal value of coinage in relation to that of its silver contents meant an advance in the direction of economy in bullion reserves and a new elasticity on the basis of the existing ones ; and (b) the discontinuance of silver imports, hitherto the main factor introducing elasticity into the currency, encouraged a growing rigidity in it. So when in the busy season of 1897—98 there was an extreme stringency in the money market and the minimum rate of the Bank of Bengal rose to 12 per cent, opinion was divided as to the causes. The silver enthusiasts considered it another proof of their contention that the mints should be re-opened, while the others pointed out that such stringencies were common even during the silver regime. The evidences on the matter given before the Fowler Committee (1898) provide a valuable indication of contemporary opinion on the nature of the rate of interest.

Interest Rate Fluctuations and the Gold Standard Proposal

The general conception of the rate of interest appears to have been that in the long run it was determined by the relation of the stock of real capital to the demand for its service but that the interest for short loans oscillated about this rate with an acute sensitivity to casual stringencies and redundancies. It was only real capital that could provide the force needed to make business prosperous, and a supply of currency was but the flux that made this real capital fluid. The undercurrent of agreement between the witnesses was therefore that, scarcity of capital being the main feature in India, the prime necessity was a smooth flow of capital from Britain to India. Some variation in the interest rates between the busy and slack seasons was inevitable and all that should be avoided were extreme stringencies, as in 1897—98. The variations in exchange rates must therefore be evened out first and then the discount rates would take care of themselves.

Professor Marshall, who also gave evidence before the Committee, was the only one to suggest that variations in discount rates were a

separate problem demanding a separate solution.¹ Some others referred to the embarrassment caused by the collection of Government revenue in the busy agricultural season and pleaded that the Government balances should be put at the disposal of the banks. But the prevalent attitude to it was reflected in the evidence of Mr. Lindsay : " I think myself that it is a faulty system on the whole, but I should not recommend any change being made at the present when the Government are endeavouring to fix sterling exchange. "²

The verdict of the Fowler Committee was in line with this trend of thought which identified the immediate problem with exchange rather than with banking. " In order to diminish the risk to Indian commerce of such stringency, and in order to reduce the average rate charged for the local use of money, the sound policy is to attract capital to India from the gold-standard countries which have capital to hand, and this can best be achieved by a gold standard and a stable exchange. "³

This belief in the Gold Standard must be held responsible for the revival of the central-bank idea at this time. The Gold Standard was viewed as a method of balancing international indebtedness arising through trade ; if the balance of trade went against a country it would lose gold to its creditors, the central bank's reserves would fall, its discount rate would automatically rise, and this quick transmission of effects by the central bank to the base of the economy was supposed to eradicate those features which gave rise to the unfavourable balance. It meant also that excessive fluctuations in discount rates, independent of the balance of trade and based, for instance, simply on seasonality of production and trade, would complicate this smooth mechanism.⁴ The effective maintenance of the Gold Standard therefore seemed to require the creation of a central institution. But it was realised too that with the preference of the people for coin and with the lack of the deposit banking habit a central bank would have to have a large capital if it was to prevent excessive short term fluctuations in discount rates. The Government of India accordingly suggested that the three Presidency Banks should be amalgamated into one central bank instead of creating a fresh bank for

¹*Fowler Committee Report* : Evidences. Qs 11852 & 11776.

²*Ibid.* Q 3512.

³*Fowler Committee Report.*

⁴Mr. Hambro, in his minority report, says that " the success of the recommendations of the Committee will very much depend on the banking wants of the country being assisted in times of pressure and curtailed in times of slackness, " and that this could be done only " by the establishment of some institution having ample facilities at its disposal and framed on somewhat similar lines to those of either the Bank of England or the Bank of France. " *Fowler Committee Report.*

the purpose. After a lengthy correspondence between the Secretary of State and the Government, and the Government and various other local bodies, the whole matter was however dropped on the ground that circumstances were unfavourable.¹ But the lull was short-lived.

The failure of the attempts to implement the recommendations of the Fowler Committee and the unexpected evolution into a Gold Exchange Standard are well known. In 1898 a Gold Standard without a gold currency seemed undesirable and even an utter impossibility, in spite of the earlier writings of Ricardo and Marshall and the more recent proposals of Mr. Lindsay before the Fowler Committee. But when gold currency failed to become popular and such gold coins as were injected into the system were faithfully returned to the mint, the only alternative open was to keep the rupee as legal tender and to take steps to ensure its convertibility into international currency at an approximately stable rate. Thus expediency drove India to recognise that so long as gold was available for payments of international indebtedness at a fairly constant rate it mattered little what form the national currency took, but the ultimate effect was to switch attention back from problems of exchange to those of national currency.

Central Bank to remove Internal Inelasticity

The flow of foreign capital into the country took place as smoothly under the Gold Exchange Standard as it was calculated to under a Gold Standard.² Since the new arrangement was to provide local currency in exchange for international currency deposited in London, the problem was therefore no more the insufficiency of foreign capital but the statutory requirement to provide local currency against it. This had been facilitated by the Act of 1898 which authorised the issue at the same rate of notes in India against gold deposited in London and earmarked at the Bank of England as part of the Paper Currency Reserve, and later in 1906 by the establishment of the Gold Standard Reserve in India. The elasticity imparted in this manner was however not enough to even out the seasonal variations in discount rates, and the distinction between long-term and short-term elasticity began to be more clearly appreciated. "The main point can be put briefly thus," wrote Keynes in 1913, "If funds are to be attracted from abroad for a short period (say three months), the rate of interest must be high enough to repay the cost of remittance both ways, which in the case of places so remote from one another as India and London is considerable. If there were some authority which

¹*Papers relating to the Establishment of a Central Bank.*

²R. S. Pandit, *India's Balance of Indebtedness, 1900—13*. According to Mr. Pandit, Britain invested nearly £100 million in this period.

would create money in India during the busy season it would not be necessary for the rate of discount to rise so high."¹ The great expansion of paper currency as well as the rapid development of credit in general in the preceding decade lent support to the idea of a central bank for imparting internal elasticity.²

The change in outlook is obvious from the evidences before the Chamberlain Commission of 1913. The central bank was no more conceived as a cog in the "automatic" machinery of the Gold Standard but as an institution with separate identity and with different functions. It was pointed out that it would break the unnatural dissociation of note-issue from banking that had existed ever since 1861, and it was urged that to overcome the disadvantages of the seasonal fluctuations in Treasury balances they should be handed over to the custody of a central bank.

But just as only one or two people foresaw in 1898 that the maintenance of a stable exchange rate was not the sole monetary problem to be solved, those who saw in the creation of a central bank a prospect transcending currency reform were few in 1913. The idea expressed in the evidence of Sir Daniel Hamilton therefore assume a certain significance. "The fatal defect.....in Indian banking," he said, "is that it makes no provision for the financing of the great industry of the country—agriculture.....this gigantic industry has been left to the mercy of the small money-lending capitalist.....It is the organisation of its capital that India wants more than its increase. There is plenty of capital in the country but it is mainly in the wrong hands.....That is the great problem to which a State Bank should address itself.....in one way or another a bridge must be built by which the producer can reach the cheap money market."³ Only one other person had said something to this effect in earlier years, and that was Justice Ranade (usually known as the first Indian economist), but even his suggestion was too visionary to bear comparison with it.⁴

The concrete recommendations of the Chamberlain Commission were confined to measures for introducing temporary elasticity to

¹Keynes, *Indian Currency and Finance* (1913), page 54.

²Appendices to *Chamberlain Commission Report* (1914), page 658.

	Notes in Active Circulation	Private Deposits in India	Clearing House Returns (Calcutta, Bombay and Madras)
1900	2209	3146	2,12,35
1905	2845*	5130	3,00,45
1911	4017	8490	4,54,51
			(Rs. lakhs)

³*Report of the Chamberlain Commission*, Appendix XVI.

⁴Speech at the Industrial Conference at Poona in 1891 loc. cit. Theodore Morrison, *Industrial Organisation in an Indian Province* (1906), page 107.

the currency. But its Report suggested that the establishment of a central bank deserved early and careful consideration, and added that it was intimately related to "the extension of co-operative credit in India, the improvement of banking facilities and the encouragement of sound banking". Keynes, who was one of the members of the Commission, even went so far as to prepare a draft constitution for it, but the Great War intervened and all the proposed currency and banking reforms came to a standstill.

Before we leave this important formative period in the development of monetary management in India it may be pointed out that neither in theory nor in practice was 1913 a great advance on 1863. One can read the passages from Cooke and Hamilton quoted above and yet be oblivious of the fifty years between the two. So too, in the realm of practice, if we take features like the dissociation of note-issue from banking, the system of proportional reserves and the divorce of Treasury from banking operations there is little difference to mention. The "accident" of the Gold Exchange Standard and the expansion of the commercial banking system constitute perhaps the only changes of importance. Even they were changes in environment rather than changes in the substance of monetary management.

Re-orientation of Ideas

The effect of war finance was to relax the traditional mechanisms of monetary management in all the belligerent countries and at the same time to fasten attention on the "tyranny" of money in economic life. When the war was over there was therefore a reaction in favour of a quick return to "normal" conditions. The dominant position acquired by the respective Governments in monetary affairs, the rising spirals of prices and costs, and the uncertain variations of the exchange rates were all cited as undesirable features that should be removed. It was out of this discontent and impatience that a wave of enthusiasm for central banks arose all over the world.

The sentiment was not new to India, but the experiences of war-time both accelerated concrete progress in the direction of unified monetary control as well as introduced some new ideas on how it should work. Firstly, the war brought the Government and the Presidency Banks closer together and increased friendly co-operation between the Presidency Banks themselves. This taught a lesson that was more valuable than anything preached by academic economists and Royal Commissions. Secondly, as the war progressed, attention was naturally drawn to the extent of India's economic dependence on countries with whom trade

relations were cut, and strengthened the growing national demand for the industrialisation of the country! An Industrial Commission, which was appointed to consider the problem, referred to the completely unorganised condition of capital *inside* the country and characterised the lack of financial facilities as one of the most serious difficulties in the way of Indian industries. Thus the task of organising and developing the banking system of the country for the sake of internal economic development received recognition, almost for the first time.

This is the psychological background to the amalgamation of the three Presidency Banks into the Imperial Bank of India in 1921, and explains also many of its features. The Bank was recognised from the beginning as a semi-public institution, with provisions for a certain measure of control by the Government. The Government made it its main banker and gave it the free use of Government Treasury funds. In the true central banking tradition the Bank was also expected to play the part of a bankers' bank, holding their cash balances, rediscounting their bills, and assisting them in times of crises. At the same time the Imperial Bank was permitted to continue performing those commercial banking functions which it had inherited from the Presidency Banks. In fact they went further and made it a pre-condition that the Bank would open no less than a hundred new branches within five years of its inauguration. The importance that was attached to this clause can be gathered from the opening remarks of the Finance Member in the Legislative Council. "This scheme does not merely represent an ordinary banking amalgamation. It has an important aspect in this connection.....But it seeks to go further," he said. "It will increase the resources of the three Banks by handing over the whole of our balances to them ; and seeks in turn to make use of the amalgamated institution as a means of furthering the banking development of which this country stands so much in need.....*an indispensable preliminary to any widespread growth in banking (is) the establishment of a strong Central Bank, in intimate relation with the Government, and with a large number of branches throughout the country.*"¹

Principle underlying Mixed Constitution

The Imperial Bank was therefore expected to function in normal times not as a brooding omnipresence like the Bank of England, but as a living and intimate force ceaselessly exerting its influence. In this respect it was different from the Bank of France only in two ways. It was forbidden to deal in foreign exchange, and secondly it was not given the power to issue notes. These restrictions were probably intended to tone down the inherent conflict

¹*Proceedings of the Imperial Legislative Council, Volume LVIII, page 1082 (my italics).*

between private profit and public interests for an institution which had yet to establish a tradition of its own that could be considered stronger than legal stipulations.

It would be a mistake to believe that the theoretical consideration of the advantages to be derived from a mixed constitution carried no weight with the framers of the Imperial Bank Act and that it was a political compromise with no particular economic objective as such. Mr. Howard, who was one of those responsible for the new Bank, writing in the *Economic Journal* in 1921, said: "It will no doubt be observed that the sphere and functions of the Imperial Bank of India do not coincide with those of a central bank under the strict definition of such an institution where a highly developed banking system and a central discount market are in being. In such conditions the ideal to be followed in framing the constitution of a central bank is admittedly mainly that of a bankers' bank, entrusted with the powers of note-issue in addition to other Government business, but in various other respects, strictly limited in its functions. But....conditions in India have been such as to necessitate evolution on other lines. The problem to be met differs, for example, widely from that which faced the framers of the Federal Reserve System in the United States, where many thousands of banks were already in existence, and where it remained merely to fit the arch. In India the complete foundations have still to be properly laid and we have to build up from the base."¹ The constitution of the Imperial Bank was therefore a conscious experiment (at any rate in the minds of those who framed it) in the application of central banking principles to a country which had yet to make so much headway in the organisation of credit. It is of interest to examine how far the Bank succeeded in filling this role that was assigned to it and whether its record justified its creation.

Strictly speaking, the period of the Imperial Bank's free and self-confident leadership lasted no more than five years. By 1927 the plans for a separate Reserve Bank were in the air, and it was clear that sooner or later the Imperial Bank would lose its privileged status among other commercial banks. By 1930 India had also been swept by the wave of depression into a state of utter economic chaos, amidst which financial institutions, least of all, were in a mood to experiment. Even in the period 1922-27, the dominant factor in the situation was the deflationary policy enforced by the Government through its currency and exchange management, and over which the Imperial Bank had no control. These limitations, though not decisive in any sense, are nevertheless worth remembering.

¹*Economic Journal*, Volume XXI June 1921.

The most direct outcome of the amalgamation of the Presidency Banks was the opening of the promised hundred new branches. Special attention was given by the Imperial Bank to provinces like the Punjab and the United Provinces where hitherto the influence of modern banking had been even less than elsewhere. Thirty-six branches were situated in places where there was previously no other bank, bringing the total number of purely pioneer branches of the Bank to seventy-five. There was also a parallel increase in the branches of the other banks, but opinion has differed widely on the motive force behind this expansion, some holding that it took place as a result of the Imperial Bank's policy of branch extensions and others that it materialised in spite of it. Whatever its causes, the further development of branch banking did introduce a greater degree of internal mobility of funds than existed before. This was also strengthened by the cheap remittance facilities which the Imperial Bank began to provide from 1921.¹

Secondly, the establishment of the Imperial Bank assisted the process of adjusting and revising certain obsolete arrangements in financial management. The first of these was the Independent Treasury System. Ever since 1876 it had accentuated the seasonal swings of monetary conditions, by locking up funds just when they were most needed for other purposes and releasing them in the slack season. The transfer of Government balances to the Bank automatically brought this System to an end. Then there was the responsibility of the Government of India for meeting annually its sterling obligations in London. For a long time the system followed was to authorise the Secretary of State to sell by tender, once a week in London, rupee bills and telegraphic transfers on the Government of India to those who required rupees for financing Indian trade (and to supplement it, if necessary, with the sale of intermediates at higher rates between these weekly sales), and use the funds so acquired for the purpose. This meant in practice that these sales were made without reference to the fluctuating prospects of the rupee-sterling exchange rate which could be gauged more satisfactorily from the Indian side. Nor was it possible to use the acquisition of sterling for remittance as a form of open market operation to influence internal monetary conditions. When the Imperial Bank became the Government's banker this system was gradually changed. Instead of selling bills and telegraphic transfers in London to those who required rupees

¹The Reports of the Controller of Currency give the total amount of demand drafts purchased and Drafts and Telegraphic Transfers paid in the branches of the Imperial Bank every year.

(In Rs. crores)	1921	1925
Total Demand Drafts purchased ...	58.2	157.0
Total Drafts and Telegraphic Transfers paid... ..	86.4	174.0

to pay for the exports from India, sterling began to be bought in India from the exchange banks and other institutions involved in the export trade and remitted to London as and when the strength of the exchange rate permitted. The significance of this will be discussed in Chapter VII.

Failure of Hundees

But the Imperial Bank provided no adequate solution to the crucial problem of currency inelasticity and the seasonal stringencies to which it gave rise. The issue of notes was still subject to the Paper Currency Reserve Amendment Act of 1920, whose main clauses were as follows :—(a) The metallic reserve against the paper currency should be at least fifty per cent of the total reserves, (b) Of the securities held in the Reserve, not more than Rs. 20 crores could be in India, the remainder being held in England in short-term securities not exceeding a period of twelve months, (c) To meet seasonal demand, the Controller of Currency was authorised to issue notes up to Rs. 5 crores against inland-discounted bills of exchange maturing within ninety days of issue ; this extra issue was to take the form of a loan to the Imperial Bank against the deposit of accepted bills of exchange at an interest rate of 8 per cent. Since the logical outcome of this arrangement was to deny assistance till the Bank Rate of the Imperial Bank exceeded 8 per cent, the minimum rate was later lowered to 6 per cent and the maximum loanable amount raised to Rs. 12 crores.

Apart from the defects inherent in a system whose purpose was to isolate currency from banking business, the conditions laid down for the issue of "emergency" currency to the Imperial Bank were themselves ill devised. They ignored the fact that unlike in the West, business of a self-liquidating character in India did not create negotiable instruments like the bills of exchange, which could be used for discounting and rediscounting and made the basis for the distribution of financial assistance. It was a mistaken idea that the Indian 'hundees' were equivalent to bills of exchange in the western sense. The two resembled each other in that they were both written orders made by one person on another for the payment on demand, or after a specified period, of a certain sum of money to a person named therein. But there ended the resemblance. For, while bills bear on them the evidence that they are drawn against goods duly despatched from one trade centre to another, the 'hundees' were primarily instruments to get advances and had often nothing to show that they were drawn against goods in production or transit. The discounting of the 'hundee' by a joint stock bank through the agency of an indigenous banker therefore signified nothing about the value of the harvest produce behind it but merely reflected the credit and standing of the indigenous banker who was willing to put his signature

on it. It has been said that in actual practice "hundees approximate more to cheques."¹

Under these conditions the insistence that only internal trade bills or 'hundees', drawn for trade purposes and maturing within ninety days of acceptance, could be accepted by the Controller of Currency for the issue of emergency currency raised a major problem in the distribution of finance. In his evidence before the Hilton Young Commission of 1926, the Managing Governor of the Imperial Bank referred to the difficulty in finding a sufficient quantity of domestic bills with the necessary qualifications, and complained that the manufacture of bills from cash credit accounts had been objected to on the ground that they were not "self-liquidating."

Question : Do you consider that a substantial objection?—

No, I do not. I consider that the business which is behind these advances is the business which does create the true seasonal demand and that the advances do gradually liquidate themselves.....

Continuing, he added that the existing system of advancing business by cash credits was a very old custom which had worked satisfactorily for the banker as well as the borrower.²

The effect of these difficulties, as they became more and more evident, was to encourage a dual line of approach to the problem of currency elasticity. While on the one hand, the anomaly in maintaining the divorce of currency from banking control was clearly recognised, the conviction also grew that it was not enough to have a large fund of currency to be drawn upon but that there should also be some means by which it could be made available to those who were in need of it.

Imperial Bank: Failings and Limitations

But meanwhile the Imperial Bank was steadily growing more and more unpopular with the other banks. It had started off well enough as a bankers' bank by holding considerable amounts of their balances and making advances to them in return.³ Also,

¹Jain, *Indigenous Banking in India*, page 72

²*Report of the Hilton Young Commission*, Evidences Qs 9656—58.

³The following figures, given by the Managing Governor of the Imperial Bank before the Hilton Young Commission, must be interpreted with due allowance for the drastic deflationary trend of the period.

	Bankers' Balances		Bankers' Borrowings	
	Highest	Lowest	Highest	Lowest
1921 ...	3,751	1,751	286	12
1922 ...	2,453	664	439	43
1923 ...	2,331	465	618	26
1924 ...	1,501	193	1,018	85
1925 ...	1,337	192	588	54

(in Rs. 000)

in 1923, when the Alliance Bank of Simla failed the Bank had gone to the rescue of its creditors and averted a situation which would have had unpleasant effects on banking development in the country. But there were certain elements in the situation, some of the Imperial Bank's own making and others which were extraneous to it, which prevented it from rising to that dignity and status which were expected of it. Firstly, the statutory regulations on the bills eligible for emergency currency not only curbed the Bank's own enterprise¹ but limited severely the facilities that it could offer to other banks by way of rediscounts. Secondly, the banks themselves, proceeding from a false sense of pride and self-reliance, were averse to going to the Bank for assistance, and found other means of guaranteeing their liquidity. Thirdly, the sense of responsibility of the Imperial Bank management appears to have fallen short of just those requirements which were of vital importance to a backward country. This was best witnessed in its attitude to the Co-operative Movement. "The Bank assumed, especially towards the latter half of its career, an extremely obstructive attitude, epitomised in the suggestion of its Managing Governor to the Central Banking Enquiry Committee in 1931 that it was irregular for co-operative banks, which were subsidised by the taxpayers, to receive free remittance facilities from the Bank for the purpose of competing "in ordinary banking business with commercial banks which have no such advantage."²

The limitations of the Imperial Bank as a bankers' bank were rooted in its constitution. Firstly, being a commercial bank, it was a mistake to have made no provision to restrict its profits—an omission which proved to be tactically and otherwise fatal to its integrity. It made the public and the other bankers suspicious of the Bank, and undoubtedly encouraged the Bank itself when confronted with a direct choice between public and private interests to fall for the latter. Secondly, a Bank under foreign management and closely connected with other foreign interests in the country was hardly likely to develop into a national institution. It came to be identified as just another instrument for imperialistic exploitation. The Imperial Bank acquired a reputation for being anti-Indian, and it confirmed this by its singular failure to champion India's national interests even on one occasion in those

¹While the Bank collected Rs. 8 crores of deposits through the new branches between 1921 and 1926 the advances made through them were only Rs. 3.4 crores. *H. T. Commission Evs. Qs. 9649—51.*

²*Central Banking Enquiry Committee Report, page 145.*

eventful years of the 'twenties when it had every opportunity to do so.¹

Victory of the Anglo-Saxon Concept

The sum total of the Bank's failings therefore encouraged a common sentiment among otherwise diverse sections in favour of its immediate dethronement. In the midst of this the earlier aspirations embodied in the idea of a privileged bank with commercial banking functions (assuming, of course, that men like Mr. Howard meant what they said) were forgotten. It was unanimously agreed that a central bank should not be allowed to compete with other banks in their exclusive functions. Even the faith in the advantages of a rapid expansion of the banking system suffered diminution, and attention was shifted to the ways and means of creating a discount market, as in Britain, for the distribution of financial assistance from the central bank. Along with this there were also doubts as to the co-operative banks ever growing to be an adequate alternative to the old indigenous banks. "The problem does not lie, as many think, in the lack of financial facilities," wrote the Managing Governor of the Imperial Bank. "It lies in the lack of power to use the facilities which exist, and which would adequately increase in response to any healthy growth in the creditworthy demand." He went on to say that the co-operative banks were never likely to oust the indigenous banker and the shroff, and that it was not desirable that they should. "There is ample room for both, and a system under which both work in co-operation is well worth considering as an ideal to be aimed at."²

The displacement of the Imperial Bank from the seat of power does not, by itself, give any cause for regret. Apart from the spontaneous, and sometimes automatic, modifications following in the wake of its establishment, the Bank did not introduce any new techniques of monetary management which were thereafter lost to the country. Its loans and discounts were limited for reasons mentioned earlier. Its open market operations, even if undertaken, could be of little value, as the liabilities of the Bank could not be considered as equivalent to cash either by the public

¹Mr. Gubbay, who was Controller of Currency at the time of the creation of the Imperial Bank and was one of those responsible for it, said in 1926 that one of the possibilities that he had in mind was that the Bank would serve as an adviser to the Government on what it considered as necessary in the interests of the country. "I said to them : it is bound to occur that the Governor and the Managing Governor of the Imperial Bank will have to stand up to the Government, if they think that the Government are taking steps which they regard as likely to endanger or be inimical to the general requirements of the country. I say of that function of the Imperial Bank I have seen no evidence whatsoever that it has been or is being discharged." *Hilton Young Commission Report*, Volume V, page 116.

²*Indian Finance Annual Number*, 1932-33.

or by the other banks. Its relations with the capital market were of the most slender nature. There were also no valuable contacts between the Bank and the other banks. But while all this is true, it would be a mistake to ignore the ideas which were swept away along with the Bank. After 1922 it was never again heard that a Bank, endowed with special privileges, and engaged in commercial banking functions in competition with other banks (but not necessarily a commercial bank itself), could be a proper agency for managing the monetary affairs of the country. The dethronement of the Imperial Bank heralded the victory of the Anglo-Saxon concept of monetary management.

Meanwhile, as these developments were taking place and paving the way for the establishment of the Reserve Bank, there had arisen a recrudescence of interest in problems of the exchange rate. The Great War had put to great strain the delicate mechanism introduced by the Gold Exchange Standard. For, as the war progressed, two things happened : first, India's trade balances began to increase, and second, the international price as well as the internal demand for silver rose rapidly till at last a stage was reached where it became profitable to melt the silver rupee and sell the contents as bullion. The Government's reaction was to let the rupee-sterling rate fluctuate along with the price of silver as in the eighteen-nineties. But at the same time sterling was fluctuating in terms of gold. So the result was a period of violent disturbances in the exchange value of the rupee. After futile attempts to keep the rupee-sterling rate from rising above 2s. per rupee (in the course of which a good deal of the sterling assets acquired by the Government during the war was frittered away) the rupee was allowed to find its own level. At one stage it fell to 1s. 3d. sterling, but, as the trade balances improved and currency was deflated, it began to rally, till, in 1926, it was fixed at 1s. 6d. Then came the agricultural depression and the prospect of a substantial deficit in India's balance of trade. But this time the authorities would pay no heed to the demands for lowering the exchange value of the rupee to 1s. 4d. The departure of sterling from gold in September 1931 brought some relief, but the rupee-sterling rate was still fixed at the old level. Meanwhile the price of gold in terms of sterling had gone up, and, partly in response to it and partly due to agricultural distress, there began a process of gold dishoarding which helped to supply the deficit in the country's trade balance.

With internal price movements and economic activity in general so much at the mercy of the foreign-exchange value of the rupee it was natural that there should have been a return to exchange rate controversies. The exclusive concern for banking development in the country, of which there was some promise previously, did not materialise.

One more observation remains to be made about this period. Generally speaking, the events of the post-war years produced considerable cynicism among all classes of people towards questions of monetary management. As Royal Commissions came and went, suggesting schemes and tearing up others, and as political discontent with foreign rule grew, every new move was viewed as a sinister machination for the exploitation of India. We shall have more to say on this in the following chapter.

V

THE CONSTITUTIONAL BACKGROUND OF THE RESERVE BANK

THE functions and powers conferred by a Constitution are in experience seldom so rigid as to be unalterable. As an institution begins to work it often finds it necessary to invade new fields of operation and assume fresh powers. The limitations imposed by law are therefore gradually removed and new sanctions introduced till finally the institution evolves into something which its founders had not intended or even foreseen.

Nevertheless the Constitution is the starting-point, and, for some years at any rate, it provides the framework within which the new institution has to function and to experiment. Further, however much it may change later on, the original Constitution leaves an indelible mark on it, establishing customs, traditions, and sometimes superstitions, which cannot be so easily and spontaneously modified as the clauses in the statute book. The Constitution also reveals the formative influences which are often no less important than the Constitution itself. These are the reasons why an attempt is made in this chapter to review briefly the outstanding characteristics in the Constitution of the Reserve Bank.

Influence of Commissions

As for the formative influences, the proceedings of the various Commissions of Enquiry, appointed to reconsider currency and banking problems at frequent intervals in the last half a century, provide by themselves as much material as one is ever likely to require. This will have been noticed even from the frequent references to them in the last chapter.

But these Commissions in India have had a greater significance that one is likely to gather from a mere survey of their proceedings, and this can be attributed to their personnel. Being largely composed of, or presided over by British members, they have been the vehicle for introducing many ideas identified with the Anglo-Saxon school of thought into the development of monetary management in India. But, dominated as the Commissions were by members of the ruling metropolitan power, their findings were also not above

suspicion to a population which was becoming increasingly national-conscious. This was particularly true in monetary affairs in the nineteen-twenties when the vexed problem of the rupee-sterling exchange rate seemed to overshadow everything else. The Royal Commissions that were sent out to India in this period acquired the reputation of either being substitutes for action or, when action was contemplated, of having their minds made up for them elsewhere prior to their enquiries. They were considered as a means of investing unpopular and inconvenient decisions with the mark of respectability. The result was that the resistance to the ideas sowed by them was greater than would otherwise have been the case.

It is certainly not without significance that the first proposal for establishing a Reserve Bank in the country was made by the Hilton Young Commission of 1926, which also made the unpopular suggestion that the exchange value of the rupee should be stabilised at 1sh. 6d. and not at 1sh. 4d sterling. While Indian opinion was generally appreciative of the need for a central bank, more so in view of the dissatisfaction with the Imperial Bank, it was also anxious not to bargain for something worse. The linking of the proposal for a Reserve Bank with the recommendation on the level of the rupee-sterling exchange rate encouraged the suspicion that it might have been conceived as an instrument for enforcing and maintaining that rate without involving the Government directly in it. It was therefore insisted that the Bank should be a truly national institution, subject to the control of the representative political Assembly, rather than a nebulous shareholders' bank which was likely to be captured by vested interests within and without the country and whose direct responsibility would be to them.

Shareholders' vs State Bank Issue

The Government had, however, made up its mind to have a shareholders' bank like the Bank of England. So, in 1927, it introduced a Bill for the purpose called 'The Gold Standard and Reserve Bank of India Bill' and commended it to the Legislative Assembly as "the greatest measure of financial liberalism ever offered to the Indian people." The Finance Member took great pains to impress on the legislators (who, incidentally, were then by no means fully representative of popular opinion) the immense advantages of having such an institution, free from political pressure and concerned only with the maintenance of "monetary stability" in the country. But apparently "political pressure" meant one thing to the Government, and another to the elected members of the Assembly. Each wanted to keep the other out, and as the one became more adamant the more justified the other felt in its determination not to allow itself to be

out-manœuvred. " Unless we provide for ample safeguards in the matter of giving control to the public and unless the Reserve Bank and the authorities appointed by the Government to control the currency are amenable to the discipline and to the orders and mandate of this House," protested one nationalist member, " it will be very dangerous to hand the currency to a new institution of the kind proposed in the Bill." After controversy lasting over a year, the scheme was finally dropped in 1928. •

It is interesting to note that incidents of this nature were not peculiar to India and cannot therefore be explained away by its nascent nationalism. Similar conflicts were witnessed in almost all the territories under British influence, particularly in the Dominions.² British advice was always insistent on the " independence " of central banks by means of private ownership. This insistence sprang partly from a blind faith in their own native institutions which made it impossible to visualise an ideal central bank in any form but the image of the Bank of England. But it was undoubtedly motivated also by self-interest. Being a creditor country Britain was naturally interested in the financial policies of its debtors, and had reason to believe that the more " independent " the central banks were of local political pressure, the more likely they were to manage their affairs on the basis of traditional financial precepts as developed in Britain and not experiment with any new-fangled ideas of monetary management.

But, in the Dominions, as in India, this was exactly what nationalist opinion would not accept. " Each wished the new banks to serve its particular purposes," observes Plumptre. " Nationalism required that they should be creatures and agents of the state, devising and implementing financial policies in the national interest and generally benefitting the Government of the day. Financial imperialism, operating chiefly from London, required that the relationship of the banks with the state should be loose and that they should be safeguarded from undue influence by the Dominion Governments towards policies which were unsound and unfavourable to London."³ But, as he goes on to say, nationalism, which produced a great variety of arguments for monetary control in the abstract, had relatively few suggestions regarding concrete machinery. " Imperialism " being less verbose, more precise and having fewer spokesmen had a clearer idea of what it wanted.

¹*Legislative Assembly Debates* 1927, Volume 1, page 89., speech of Mr. Vidya Sagar Pandya.

²A. F. W. Plumptre, *Central Banking in the British Dominions* (1940).

³Op. cit., Plumptre, page 201.

The issue was accordingly brought up again soon afterwards in 1931, when talks began in London on the future political constitution of India. At the end of the Third Round Table Conference it was announced that the proposals for the transfer of financial direction into the hands of a Minister responsible to the elected Legislature were based on the assumption that an "independent" Reserve Bank would be in existence by the time the new Constitution was in force.¹ This opportunity for reviving the scheme also coincided with the intensified desire on the part of Britain, consequent on the trade depression and the collapse of the Gold Standard, for Imperial economic co-operation, and which found expression, in this sphere, in the idea of a chain of Empire central banks.

At the moment, however, the affairs of India were in a very bad way due to the slump in agricultural prices, and it did not seem desirable that the new institution should be launched under such inauspicious and inhospitable conditions. So it was suggested that before the Reserve Bank was actually set up the Budget of the Government of India should be balanced, its short term debt reduced, and that the mercantile export surplus of India (necessary to meet its annual obligations abroad) should have recovered its normal dimensions. These conditions were substantially satisfied by 1933. The Government therefore introduced a fresh Reserve Bank Bill in the autumn session of that year, and piloted it successfully in the course of the following two sessions through the two Legislatures concerned. The Bill received the assent of the Governor-General in March 1934, and the institution itself was inaugurated in April of the following year.

Features of Compromise

The Reserve Bank, as envisaged in the Bill, was a shareholders' bank with a share capital of Rs. 5 crores. To make it acceptable to those who wanted a State Bank, several features were introduced toning down the aspect of private ownership. Firstly, of the total capital, the Government was to contribute two hundred and twenty thousand rupees. The Government was also to transfer Rs. 5 crores in rupee securities to form the Reserve Fund of the Bank. Secondly, it was to be within the power of the Government to fix the rate of dividend, which was, in any case, not to exceed five per cent. After the payment of this dividend, and after making provisions for bad and doubtful debts, depreciation in assets, etc., a portion of the surplus profits could be allocated as an additional dividend to the shareholders; any balance, over and above all these items, was to accrue to the Government. Thirdly, half of the members of the Central Board of Directors

¹Report of the Committee on Financial Safeguards (Third Round Table Conference).

were to owe their appointment to the Government, its composition being as follows: (a) eight directors elected on behalf of the shareholders, (b) four directors nominated by the Central Government, (c) one Government official nominated by the Central Government, and (d) a Governor and two Deputy Governors appointed by the Central Government in the light of recommendations made by the Board for the purpose. Lastly, it was laid down that shareholders must either be domiciled in India or Burma (and subjects of those countries) or be British subjects ordinarily resident there and domiciled in the United Kingdom or in the British Dominions. The holding of shares by anyone was limited to a maximum of twenty thousand rupees.

Despite these saving clauses it is however obvious that, in essence, the exponents of the shareholder principle got what they wanted, namely that the Bank should not be responsible for its actions to the popular Legislatures who would otherwise be free to mould its policy. As long as this was ensured it mattered little what other restrictions were placed, and they were prepared to go to any lengths to meet the wishes of the nationalists.

Separation of Departments

The Anglo-Saxon influence exerted itself also in the matter of the Bank's organisational structure. The Bank was divided, like the Bank of England, into two Departments, the Issue Department being solely concerned with the issue of notes and kept "separate and wholly distinct" from the other, the Banking Department.

This departmental distinction, it is worth recalling, was drawn originally in 1844 due to the influence of certain theories current at the time in England, the most fundamental of these being "the Currency Principle." "The Currency Principle" stated that "that only is a sound and well regulated state of things, when no greater numerical amount of paper is in circulation than would have circulated of the precious metals if no paper had existed."¹ It was believed that this could in practice be achieved if the note circulation could be made to vary exactly with the bullion reserves. At the same time, as deposits were not considered equivalent to money, there seemed to be no reason why they should be subject to any regulations. Therefore, in the words of Ricardo, the Bank of England united two operations that were quite distinct: the issue of a paper currency as a substitute for a metallic one, and the making of loans to merchants and others.² The Issue and Banking Departments were created to correspond to these two activities.

¹Richard Page, Letters to the Editor of "The Times" Journal, on the Affairs and Conduct of the Bank of England (1826) Cf., Elmer Wood, *English Theories of Central Banking Control 1819—1858* (1939) p. 110.

²Elmer Wood, *op. cit.*, p. 111.

The error committed by the Currency School of theorists in ignoring bank deposits as a form of money was, however, also what helped to tone down the severity of the legislation they inspired and made it possible to work it, without any radical alterations in form, long after their theories had ceased to have any influence. If notes and coins had constituted the sum total of the monetary circulation, or even its greater part, the effect of the onerous restrictions on the Issue Department would have been to place internal monetary management completely at the mercy of the foreign exchanges. But, as deposits became more and more popular as media of exchange and outstripped the note circulation by several times, the Banking Department of the Bank of England found it possible to increase the supply of money considerably with the aid of a relatively small volume of notes. Thus with the help of minor changes relating to the fiduciary issue of the Issue Department, the facade of two separate Departments, as introduced in 1844, has been maintained to this day without any harm being done.

But to reproduce the same system and with similar restrictions on the Issue Department, in the Constitution of the central bank of a country where credit habits were only in the early stages of development, was to attempt to create just those conditions which were the objectives of the exponents of the Currency Principle and which have since been discredited. This, in effect, was what the framers of the Reserve Bank Act did. Rejecting the principle of fiduciary issue in favour of that of proportional issue, they laid down that at least two-fifths of the assets against note-issue should consist of gold coin and bullion, and sterling securities. Therefore, if the Bank had to part with these assets below the minimum level necessary to maintain a given volume of note circulation, the contraction would have to proceed thenceforth in the ratio of five to two. Similarly it would be impossible to increase the note issue beyond a certain level unless more gold coin and bullion, or sterling securities, were available. The significance of these restrictions for the actual operations of the Bank is analysed in greater detail in a later chapter. It is sufficient to note here that the regulations on note issue implied the acceptance of the out-dated, even if still popular, principle that monetary circulation is not only a mechanism for accomplishing a certain end but also the most efficient measure of results.

Some idea of the assets and liabilities permitted to the two Departments can be had from the prescribed forms in which they were to submit their weekly returns. As we shall have reason to refer to the various items frequently, it may be well to reproduce them below, with their values as on 31st December 1935.

ISSUE DEPARTMENT

LIABILITIES	(Rs. crores)	ASSETS	(Rs. crores)
Notes held in the Banking Department ...	21.5	Gold Coin and Bullion—	
Notes in Circulation ...	171.8	(a) Held in India ...	41.6
		(b) Held outside India ...	2.9
		Sterling Securities ...	66.2
		Rupee Coin ...	57.1
		Government of India Securities ...	25.5
		Internal Bills of Exchange and other Commercial Paper ...	Nil
Total Liabilities ...	193.3	Total Assets ...	193.3

BANKING DEPARTMENT

LIABILITIES	(Rs. crores)	ASSETS	(Rs. crores)
Capital Paid-up ...	5.0	Notes ...	21.5
Reserve Fund ...	5.0	Rupee Coin ...	Nil
Deposits—		Subsidiary Coin ...	Nil
(a) Government ...	6.0	Bills Discounted—	
(b) Banks ...	28.4	(a) Internal ...	Nil
(c) Others ...	0.3	(b) External ...	Nil
Bills Payable ...	0.1	(c) Government of India	
Other Liabilities ...	0.7	Tr. Bills ...	Nil
		Balances held abroad ...	17.4
		Loans and Advances to the Government ...	1.0
		Investments ...	5.3
		Other Assets ...	0.2
Total Liabilities ...	45.5	Total Assets ...	45.5

The further statutory regulations regarding the assets and liabilities of the Issue and Banking Departments will be discussed in their proper places in the following chapters.

Statutory Functions

The purpose in establishing the Reserve Bank was stated as follows in the preamble to the Act: "To regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in British India and generally to operate the currency and credit system of the country to its advantage." It added that, as it was not possible to determine under the existing disorganised conditions what would be suitable as a permanent basis for the Indian monetary system, the Bank should as a temporary provision work on the basis of the prevailing system, namely the Sterling Standard.

The specific functions assigned to the Reserve Bank were : (a) to manage the note issue (b) to regulate the banking system, (c) to serve as the Government's banker, and (d) to maintain the stability of the external value of the rupee in terms of sterling.

The function of note issue was assigned on the recognised principle of unitary issue, the Act placing special stress on the fact that it had "the sole right to issue notes in British India." The machinery devised to implement this function, within the framework of the Bank even if separately from its other functions, has already been noticed.

The regulation of the banking system was only nebulously conceived, it being recognised that, as long as the supply of money in the greater part of the country was in the hands of individuals whose business habits were not on a par with those of ordinary banking institutions, the control of the existing institutions could not be of any great significance. Notwithstanding, the Reserve Bank was provided with all the external forms of regulation that central banks in more advanced systems were known to possess. In the first place it was to have an official Bank Rate, to be published at regular intervals, at which it would rediscount approved securities and bills. Secondly, the Bank was empowered to undertake open market operations when necessary. Thirdly, the Bank had the right to hold the cash reserves of commercial banks. But, to put this into effect, it was necessary to specify what kinds of institutions were expected to leave their reserves with the Bank and what kinds were not. Out of this necessity was born the distinction between "scheduled" and "non-scheduled" banks. For an institution to be "scheduled" it was necessary that it should be a company or corporation engaged in the business of banking in British India, and having paid-up capital and reserves to the value of not less than five hundred thousand rupees. Each such scheduled bank was required to maintain balances with the Reserve Bank to the equivalent of not less than five per cent of its demand and two per cent of its time liabilities.

The purpose in demanding minimum cash balances from the scheduled banks in this way was explained by the Bank in the following words : "The accumulation of these balances with the Reserve Bank places it in a position to use them freely in emergencies to support the scheduled banks whenever they seek its assistance as a lender of last resort."¹ Again, "the real purpose of these balances is not to guarantee the deposits of the public with banks The primary purpose of these reserves is to enable the central bank to exercise some measure of control over the banking system."²

¹*Functions and Working of the Reserve Bank of India* (Published by the Reserve Bank of India, 1941), page 8.

²*Ibid.* page 40.

Thirdly, as the banker to the Government, the Reserve Bank was required to transact all the general banking business of the Central Government without any remuneration except what accrued to the Bank through the interest-free balances of the Government held with it. For the management of the public debt it was entitled to a nominal payment, but not for the issue of new Government loans. Under this agreement between the Bank and the Government, the Bank also undertook the responsibility for supplying the sterling required by the Government to meet its obligations abroad. Thus the function of being the Government's banker gave the Bank the effective responsibility for the flotation of the Government loans, the sales and redemptions of Treasury Bills, and the purchase of sterling from the market from time to time. But, perhaps more significant than these formal duties, was the role assigned to it of being the adviser to the Government on financial matters. Thus it could not only be an agent to do the work of the Government on its behalf, but it could mould the policy of the Government itself in the matter of its financial transactions and responsibilities connected therewith.

Lastly, for the purpose of maintaining the stability of the external value of the rupee, the Bank was obliged by statute to sell and buy sterling within certain fixed rates provided the amount offered or demanded in any transaction was not less than the equivalent of ten thousand pounds. The Bank was to sell sterling to anyone against legal tender currency at a rate not below 1sh. $5\frac{49}{64}$ d for a rupee, and buy sterling at a rate not higher than 1sh. $6\frac{3}{16}$ d for a rupee. Any change in these rates could be made only by special legislative provision to that effect and after approval by the Governor-General of India.

VI

LOANS AND DISCOUNTS : A PROBLEM IN CREDIT DISTRIBUTION

FORTY or fifty years ago a treatise on the monetary policy of the Bank of England would have been a study of its discount policy, and this would have been mainly devoted to an analysis of the changes in its discount rate. The function of the discount rate in the mechanism of the international gold standard was, according to contemporary opinion, to keep the equilibrium between the internal and external cost-price structures by maintaining the gold reserves at a safe and fairly steady level. These reserves were therefore the clue to discount policy and, in the last analysis, its rationale.

While it is true that the discount policy of a central bank even now owes its importance to the concentration of the national reserves in the hands of one institution, its character has been radically altered by the collapse of the gold standard and by the parallel growth of a monetary nationalism which gives precedence to the needs of the internal economy over everything else. The circumstances under which this transformation took place require no repetition. The result is that there is now no such thing as a distinct and self-contained discount policy which can be treated in isolation and with respect only to the national reserves. Instead we are confronted with a wide all-embracing, national monetary policy based on a variety of internal economic indices.

In the implementation of this policy also one sees less confidence placed in the discount rate than before. The feeling has grown that not even in the heyday of the Bank of England's national and international hegemony was the discount rate its sole and supreme weapon but that, in fact, effective control had always rested on its ability to influence both the rates of interest and the quantity of money.¹ A broader technique—covering discount rates, open market operations, reserve ratios, public debts, etc.—

¹Keynes, *Treatise on Money* Volume II, pages 365—366.

has therefore emerged for the purpose of enforcing policy. In this way discount policy, in the old sense, has lost much ground.

Components of Discount Policy

But, on the other hand, the extension of central banking to new areas, as well as the nationalist approach with its emphasis on local conditions and local needs, have led to a closer study of the institutions and practices which made the Bank rate what it was in England and have encouraged a wider interpretation of the term "discount policy."

Once the London money market reached a certain maturity and cohesion towards the closing years of the nineteenth century, there was for a time a tendency to take for granted its special characteristics and peculiarities when discussing the Bank of England's loan and discount operations. The special role of the discount market, which made it unnecessary for the commercial banks to approach the Bank directly, was, for instance, seldom recognised. So was the force of custom and tradition in the determination of the structure of interest rates ignored. But when these omissions came to be noted, the problem of creating a similar or substitute machinery became itself absorbed as an integral part of discount policy.

We have one of the pre-eminent instances of this in the history of the Federal Reserve System in the United States, where the absence of a discount market and the existence of a number of money markets with a loose structure of interest rates, not to mention other deficiencies and limitations, made it necessary to consider *how* to enforce a policy rather than *what* policy to enforce. Many elementary questions had to be decided before going on to the wider issues. For instance: Were they to adopt a 'penalty' rate of discount or an 'accommodation' rate of discount? How were either of these to be reconciled with the fact that there was no definite relationship between the interest rates in any of the money markets? Would this require every Reserve Bank in the System to have, instead of one official discount rate, a whole schedule of official discount rates for different kinds of accommodation? Also, since interest rates were often the determinants of the geographical distribution of funds what was to be the regional policy of the Federal Reserve System? etc., etc.

In the midst of the controversy around these issues, the problems of discount policy gradually became more and more complex. Thus at least three separate questions have since come to be included as important aspects of discount policy :—(a) the attitude of the central bank as to the qualifications necessary for a paper to be acceptable to it for discounting, (b) the restrictions it chooses to place on the customers who may approach the bank

for discounts, and (c) the relation of the official rate of discount to the whole pattern of current market rates. The confusion of ideas on the ultimate objectives of discounting, which accompanied this wider approach, is obvious from the thirteen different answers given to the United States Senate Banking and Currency Committee of 1930 when the Federal Reserve Banks were asked for the reasons which had induced them to make changes in their discount rates.¹

The mandate which the Reserve Bank of India received from the Bill which brought it into existence made no mention of the considerations which should determine its discount and loan policy except what was covered in the most general terms in the preamble. For more detailed information we have, therefore, to depend on the heritage of discussion that preceded the establishment of the Bank.

As a typical statement of aspirations we may quote the words of the Central Banking Enquiry Committee: "The establishment of such a bank would by mobilization of the banking and currency reserves of India in one hand tend to increase the volume of credit available for trade, industry, and agriculture and to mitigate the evils of fluctuating and high charges for the use of such credit caused by seasonal stringency."² The emphasis was on the Reserve Bank as a bank of *accommodation*, much as the function of the Federal Reserve System was conceived of in the United States. But opinion on this point was neither so crystallised nor so well-defined, and the same Committee goes on to refer with evident approval to a speech of the Finance Member in the Legislative Assembly in which he says that "the formation of a Central or Reserve Bank is desirable in order that India may be equipped with a mechanism for the *control* of currency and credit on the lines approved by banking experience."³

Dual Conception of a Discount Market's Functions

This dual conception became more evident when it came to suggesting a plan of action. Of the many proposals made at this time, the one that received the greatest unanimity and approval was that the Reserve Bank should take steps to encourage the creation of a discount market in India within the shortest possible time. How this feeling grew has already been traced in Chapter IV. From that historical angle one got the impression that the discount market was conceived as a means of distributing financial assistance to sections of the population hitherto untouched by modern banking development—in other words, as a link between the Reserve Bank and the rural agencies of finance. Into this

¹Parker Willis, *Theory and Practice of Central Banking*, Ch. 8.

²*Central Banking Enquiry Committee Report*, page 417.

³*Ibid.*, page 418.

discount market would come bills of exchange drawn or endorsed by the indigenous bankers and money-lenders, and either they or the scheduled banks (possibly discount houses as well) would approach the Reserve Bank for getting them rediscounted. Since the aim was to aid rural finance the Bank would presumably have to make rediscounting as favourable as possible to the market by giving special preferences to agricultural bills and charging rates of interest which would not penalise those who approached the Bank. In due course, then, all legitimate demands for funds would be met, the different sections of the money market would be "unified", and regional and seasonal monetary stringencies would be eliminated.

But side by side with this pipe-line concept of a discount market, there was also the frequent suggestion that a discount market was an essential element in central banking organisation, and that by operating in such a market the Reserve Bank would be able to enforce its credit policy. The implications of this view, if the analogy was drawn from the money market mechanism in London, are obvious. The Reserve Bank would then have to establish a tradition of keeping away from the market under normal conditions, and encourage the other banks to leave all their spare funds for employment in the discount market. The day to day financing of bills would be done by the agencies in the discount market, and only when their funds were exhausted would they approach the Reserve Bank. The Bank would accordingly be in a position to show its pleasure or displeasure, as the case may be, through its rate of rediscount. Carried to its logical conclusion, this would rule out any special favour being shown to agricultural bills, not to mention the limitations in promoting at the outset the development of a discount market itself. In short, a discount market could be useful for enforcing a credit policy only when there was some uncertainty as to the assistance it would receive from the Bank under stringent monetary conditions.

These two views on the role of the discount market could have been reconciled only if there were substantial concessions on both sides. The supporters of the pipe-line concept would have had to agree that, at times, the central bank might find it necessary to stand firm even at the expense of agricultural financing; on the other hand, the supporters of the money-market concept should have been willing to recognise the limitations on monetary control. Given these concessions it could then be said in a general way that a discount market, dealing in bills of different types and of different maturities, would introduce a greater degree of competition and resiliency into the money market and make it more sensitive to the operations of the Reserve Bank. It was probably some such vague concept that was behind the minds of those who spoke, in

the same breath, of a Reserve Bank which would "control" as well as "accommodate" through the agency of a discount market.

Bias in favour of 'Accommodation'

The actual recommendations of the Central Banking Enquiry Committee were less ambiguous than its more abstract speculations. Firstly it suggested that the indigenous bankers, and such money-lenders as would accept the same conditions as the indigenous bankers, should be brought into direct relations with the Reserve Bank for the purpose of loans and discounts, on a par with scheduled banks. But since not many indigenous bankers and money-lenders were likely to be brought into the Reserve system under this scheme, it was necessary at the same time to devise a more indirect mechanism of linking—namely, through the development of a market in agricultural bills. With this in view the Committee made a number of recommendations. Under the regime of the Imperial Bank, the Bank Rate was the rate at which it was prepared to grant demand loans against government securities. The commercial banks therefore preferred taking advances on this basis, when they required any assistance, to rediscounting bills with it at a rate which was usually the same or higher than the Bank rate. It gave them the advantage of returning the amount advanced as soon as they had sufficient funds to spare and thus saving the interest on the remaining period. To make the rediscounting of bills more worthwhile and thereby to popularise their use in the asset structure of the commercial banks, the Committee suggested that the Reserve Bank's published rate should be the minimum rate at which it was prepared to buy or rediscount first class trade bills and promissory notes. It might also be desirable to charge a higher rate for demand loans against authorised securities, but the decision on that was to be left to the discretion of the Bank.

Secondly, since the development of a bill market would take time and meanwhile "the Reserve Bank may have to follow instead of controlling the member banks with regard to the interest rates in the country in the busy season";¹ the Committee recommended that the Bank's powers be extended so that it could grant financial facilities not only by purchase and rediscount of bills but also by grant of loans and advances on the security of movable goods, wares and merchandise as well as against goods and warehouse receipts representing such goods. "We agree that the Reserve Bank should not ordinarily compete with commercial banks for profit, but in our opinion it ought to be in a position to operate in the open market and compete with the commercial banks so as to make its policy effective."² Thirdly, as an

¹Ibid, pages 419—420.

²Ibid, page 420.

additional measure for giving assistance to seasonal agricultural operations, it was suggested that while commercial bills purchased or rediscounted by the central bank should mature within ninety days of the date of purchase or rediscount, the currency of agricultural bills might be extended to a period of nine months.

The only provisions recommended by the Committee, which could be interpreted as signifying its support for direct and immediate credit control, was that every scheduled bank entitled to rediscounting facilities from the Bank should keep certain proportions of its demand and time liabilities in India as interest-free balances with it. But even here an exception was made for approved indigenous bankers during the first five years of their relationship with the Reserve Bank. All these go to confirm the impression that even if it was hoped that the Reserve Bank would one day be the absolute master of the country's currency and credit, its immediate functions were to be as a bank of accommodation, with influence rather than power as its objective.

Statutory Provisions

The Reserve Bank Act embodied most of the recommendations of the Central Banking Enquiry Committee. First, it defined the kinds of paper which the Bank would accept for rediscount. They included (a) *bona fide* commercial or trade bills, drawn on and payable in India, maturing within ninety days and bearing the prior endorsement of a scheduled bank, (b) bills, issued or drawn for the purpose of holding or trading in Government securities and in certain other public securities, but otherwise having the same qualifications as above, (c) bills drawn for the purpose of financing seasonal agricultural operations or the marketing of crops, endorsed by either a scheduled or a co-operative bank, and maturing within nine months, and (d) bills, including treasury bills, drawn in or on any place in the United Kingdom, maturing within ninety days, and endorsed by a scheduled bank.

Secondly, it provided for the extension of loans and advances for a maximum period of ninety days to scheduled banks, provincial co-operative banks and certain public authorities against the security of (a) bills of exchange and promissory notes eligible for rediscount by the Bank, (b) promissory notes of any scheduled bank or a provincial co-operative bank, "supported by documents of title to goods which have been transferred, assigned or pledged to any such bank as security for a cash credit or overdraft granted for *bona fide* commercial or trade transactions, or for the purpose

of financing seasonal agricultural operations or the marketing of crops",¹ and (c) stocks, funds, securities, gold, silver, etc.

Thirdly, it had an 'escape clause' by which the Bank could, if a special occasion arose for "regulating credit in the interests of Indian trade, commerce, industry and agriculture", resort to direct discounts and direct loans without the mediation of a scheduled or a provincial co-operative bank.

Lastly, it laid down that the Bank should at the earliest possible date and in any case within three years of the Act coming into force, make a report, with such proposals as it thought fit for further legislation, on the following matters :—(i) the extension of the provisions of the Act relating to scheduled banks to persons and firms, who, though not scheduled banks, were engaged in the business of banking, and (ii) the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer connection between agricultural enterprise and the operations of the Bank.

Though these provisions were themselves liberal it is important to make no mistake about the scope of the Reserve Bank Act. The Act did not envisage a radical transformation of the existing banking structure in India. All that it attempted was to draw the scattered and rather undisciplined elements of that structure into the orbit of a new Reserve System and to give it a loose unity and coherence by opening up channels for closer contact between them. The indigenous banker, far from being eliminated, was to be strengthened by being given a special status *vis a vis* the Reserve Bank. The co-operative banks were to remain, but did not receive any special favours of importance which the scheduled banks could not claim as well. Above all, there was no special incentive provided for the ordinary scheduled bank to extend its branches to the rural areas, apart from the rediscount and loans facilities promised by the Bank. The Reserve Bank was therefore to be an institution superimposed on a heterogeneous mass of commercial banks, exchange banks, co-operative banks, indigenous bankers and money-lenders, giving them assistance subject to the satisfaction

¹Later on, the Bank explained that the word "which" in this clause referred to "documents of title to goods", and not to "goods". If the goods themselves had been transferred to a scheduled bank by its customer the document of title would have to be created by the scheduled bank which had made the advance, and it was not possible for a scheduled bank legally to create such a document in respect of goods which were only pledged with it. The scheduled bank must therefore have given an advance to its customer against documents of title to goods and not against the goods themselves if it was to pass the Reserve Bank for obtaining accommodation from it.

of certain conditions, and unifying the floating resources of the whole system through the development of a bill market.

Loans and Discounts, 1935—39

In the older view of discount policy, it was the essential mark of a central bank to remain aloof from the market under normal circumstances. It was then its duty to limit the class of customers that it might receive, restrict the kinds of paper on which it would accommodate, and, above all, maintain a 'penalty' rate of discount. But with the acceptance of the view that the primary function of the Reserve Bank was to accommodate at all times, it is clear that insularity, which would otherwise have been a virtue, must be judged a sign of weakness.

From this point of view, the record of the Reserve Bank between 1935 and 1939 is a sad commentary on its relations with the money market. The following table represents a quarterly analysis of the loans and discounts of the Bank in this period.

TABLE I				(Rs. crores)
(Average of Friday figures)	Bills discounted (Internal)	Bills discounted (Govt. Treasury Bills)	Loans and Advances to the Government	Other Loans and Advances
April 1935	...	—	—	—
July "	...	—	—	—
October "	...	—	—	—
January 1936	...	—	4.4	—
April "	...	—	3.5	—
July "	...	—	1.8	—
October "	...	—	0.4	—
January 1937	...	—	0.6	—
April "	...	—	0.6	—
July "	...	—	1.0	—
October "	...	—	—	—
January 1938	...	—	2.2	—
April "	...	0.2	0.4	—
July "	...	1.3	—	—
October "	...	0.1	5.8	—
January 1939	...	7.8	5.4	0.1
April "	...	2.2	0.4	0.5
July "	...	—	1.8	—

It is clear from the table that the only regular customer of the Bank was the Government. Its loans and advances reveal a seasonal trend, increasing in the months October to May when the demand for money was active in all parts of the economy, and falling off in the slack season. There was also some increase in July and August when the Government floated its long term loans. But while, to all appearances, these demands were being made in the name of the Government, and on its initiative, the responsibility was really with the Reserve Bank. As the Government's

banker, it was the Bank which, in practice, allocated the short-term borrowing of the Government between the market and itself—if, from the market, through the sale of Treasury Bills by tender, and, if from the Bank, through the sale of Treasury Bills on tap or plain 'loans and advances'. It follows, then, that even this item has to be left out of consideration here, as it belongs more properly to operations taken up by the Bank on its own initiative (Chapter VII).

We are thus left with a balance sheet which is practically blank, the commercial-bill discounts being particularly conspicuous by their absence. There seems to have been, in fact, only one major discounting operation in the whole period—in January, 1939, when nearly Rs. 8 crores of Treasury Bills were discounted with the Bank.

It has been offered as an explanation for this that the demand for loanable funds in this period was, on the whole, at a low ebb and that there was no need, therefore, for anyone to go to the Reserve Bank for assistance. The agricultural depression had affected the economy through the slump in trade as well as through the catastrophic fall in prices, and the revival after 1932 was both slow and halting. The activities connected with the export of gold, the improvement in the stock markets, and the house-building boom supported by the fixed income classes (who were doing well out of the depression) were no doubt exercising a certain amount of countervailing influence, but there was no substantial expansion in the demand for money, compared to the supply, till 1937.

Scheduled Banks Self-Sufficient?

This diagnosis appears to receive considerable support from an examination of the structure of assets and liabilities of the scheduled banks. The relevant statistics, as for the last month of each quarter, are reproduced in Table 2.¹

They show on the side of liabilities a steady increase from July 1935 to October 1937, with the demand liabilities rising slightly faster than the time liabilities. The recession which followed this period made almost no impression on the banks' deposits, and both the demand and time liabilities were remarkably steady. On the assets side, there is a similar trend, the bills discounted and advances made in India registering substantial increases between the summers of 1936 and 1937 and then (allowing for seasonal fluctuations) remaining more or less steady at that level. The item 'cash in hand and balances with the Reserve Bank' was falling throughout the period, but when placed side by side with the deposit liabilities the impression that one gets is of a comfortable reserve position which could withstand even more advances and discounts.

¹ *Monthly Statistical Summaries*, published by the Reserve Bank.

TABLE 2
ASSETS AND LIABILITIES OF THE SCHEDULED BANKS

Month	(1) Demand Liabs	(2) Time Liabs	(3) Total Liabs (1+2)	(4) Cash in hand	(5) Balances with Res. Bank	(6) Advances in India	(7) Bills Discounted	(8) Total (4+5+6+7)	(9) Investments (3-8)
July 1935	... 109.1	98.8	207.9	5.0	25.3	99.4	3.2	132.9	75.0
October "	... 121.2	96.4	217.6	5.8	29.7	84.7	2.2	122.4	95.2
January 1936	... 122.9	99.3	222.2	6.0	34.2	84.6	3.9	128.7	93.5
April "	... 120.9	101.0	221.9	5.6	35.3	95.0	6.0	141.9	80.0
July "	... 126.6	100.1	226.7	5.9	32.3	89.0	3.4	130.6	96.1
October "	... 131.3	99.4	230.7	5.9	25.6	86.7	2.6	120.8	109.9
January 1937	... 132.8	102.6	235.4	6.1	16.8	104.1	5.6	132.6	102.8
April "	... 135.5	105.6	241.1	5.9	25.2	122.5	8.1	161.7	79.4
July "	... 133.1	109.1	242.2	6.4	32.7	113.1	5.8	158.0	84.2
October "	... 134.2	109.4	243.6	7.1	24.4	106.9	4.6	143.0	100.6
January 1938	... 131.1	109.8	240.9	6.5	17.0	111.2	6.5	141.2	99.7
April "	... 128.3	109.3	237.6	6.3	13.7	124.7	7.1	151.8	85.6
July "	... 128.3	107.6	235.9	6.8	21.1	115.7	4.2	147.8	88.1
October "	... 134.8	106.0	240.8	7.3	20.9	106.2	2.7	137.1	103.7
January 1939	... 103.1	108.0	238.1	6.1	11.3	118.2	5.0	140.6	97.5
April "	... 128.9	108.1	237.0	5.9	11.5	126.8	8.0	152.2	84.8
July "	... 138.2	107.2	245.4	7.1	22.3	110.8	5.4	145.6	99.8

Then there were the investments held by them. Statistics of these are not officially published by the Reserve Bank, but they have been calculated in Table 2 by deducting the total of their other assets from the aggregate demand and time liabilities of the scheduled banks. It leaves out the amount of the capital and reserves of the banks that might have been invested in securities, and is, for that reason, an under-estimate; on the other hand, there might have been assets like the premises of the banks against the liabilities on account of capital and reserves. Nevertheless they are sufficient to show how the banks arranged their investments in response to changing conditions. Like the item, 'cash and balances held with the Reserve Bank', investments were allowed to increase in the slack season, and were liquidated in the busy season. These investments included long-term securities as well as three months' Treasury Bills. The high ratio of the investments in relation to the liabilities makes it clear that they were the banks' second line of defence. All this seems to establish beyond doubt the self-sufficiency of the scheduled banks.

Unique Position of the Imperial Bank

However, the picture presented above undergoes considerable modification, and new problems come to light, when we take into account the special position of the Imperial Bank of India among the scheduled banks. Table 3, showing the main items in its balance-sheets as for the last month of each quarter, has been compiled from the weekly statements¹ published by the Imperial Bank. Unfortunately the form in which they are published makes a direct comparison with Table 2 impossible. The main item on the side of liabilities is entered as 'Fixed Deposits, Savings Bank, Current and Other Accounts'; though in the aggregate it can be regarded as equivalent to its 'Total Demand and Time Liabilities', its different constituents give it a different significance. Again the 'Total Advances' of the Imperial Bank include not only bills discounted but bills purchased as well; the latter are classified under 'Investment' in Table 2. The Imperial Bank also makes no distinction between 'cash in hand' and 'balances with the Reserve Bank'.

For our purpose, however, we may make certain assumptions. Firstly we may take 'Fixed Deposits, Savings Bank, Current and Other Accounts' as equivalent to the total of demand and time liabilities. Secondly, considering the relatively small size of the item 'Bills Discounted and Purchased' entered separately in Table 3, we may assume that the addition of Bills Purchased to the

¹As the files of the weekly financial journals from which they have been collected were not complete, some gaps were found unavoidable in calculating the averages for certain months. Nevertheless the table presents a fairly accurate picture.

TABLE 3
ASSETS AND LIABILITIES OF THE IMPERIAL BANK

Month	Liabilities : Fixed Deps., Savings Bk., Current & Other Accounts	Investments in Govt. Securities	Bills Discounted and Purchased	Total Advances including Bills Discounted and Purchased	(Rs. crores) Cash
April 1935	...	73.0	3.0	31.8	9.0
July "	...	72.2	2.2	25.4	18.4
October "	...	76.9	1.2	20.0	19.4
January 1936	...	78.8	2.5	20.6	23.8
April "	...	78.5	3.5	25.9	26.0
July "	...	78.9	2.4	23.6	20.4
October "	...	78.8	2.2	20.3	15.3
January 1937	...	78.3	3.1	25.6	8.2
April "	...	82.8	4.7	32.1	17.2
July "	...	83.0	4.0	29.1	21.5
October "	...	81.9	2.2	24.4	15.3
January 1938	...	80.4	4.8	28.9	9.8
April "	...	80.5	4.8	35.4	6.9
July "	...	81.5	3.2	32.7	12.2
October "	...	84.3	2.1	27.5	12.4
January 1939	...	81.3	3.9	36.4	5.6
April "	...	82.3	5.0	39.7	5.7
July "	...	87.3	3.5	32.8	13.2

total advances of the Imperial Bank makes a difference of no more than one or two crores of rupees to it. On the other hand when comparing 'Investments' in Table 2 with 'Investments in Government Securities' in Table 3, it must be taken into account that while the former includes investments in Government Treasury Bills the latter covers also the securities bought against the capital and reserves of the Imperial Bank. Subject to all these qualifications and assumptions we can make a rough comparison between the structural variations in the assets and liabilities of the Imperial Bank and the structural variations in the assets and liabilities of the other scheduled banks. This is done in Table 4.

Comparison of Balance Sheets

It is clear that the advances and bills discounted of the scheduled banks other than the Imperial Bank form a higher proportion of their total demand and time liabilities than those of the Imperial Bank in relation to its total demand and time liabilities. In the case of the Imperial Bank it is about a third in July 1935 and it ends up by being just under a half in the record month of April 1939. The proportion in the case of the other banks improves from over one half in July, 1935 to nearly two-thirds in April, 1939. The investments of the scheduled banks other than the Imperial Bank form a correspondingly smaller proportion of their liabilities than those of the Imperial Bank in relation to its liabilities. The total capital and paid-up reserve of the Bank was in the neighbourhood of Rs. 11 crores, and even if we assume that the entries under 'Investment in Government Securities' in Table 3 include investments to the full amount of this, the balance after deducting them is still high.

Secondly, the cash reserves of the ordinary scheduled banks were not such a powerful shock absorber as is often imagined, especially after the middle of 1937. In July, 1937 the proportion of their cash reserves to total liabilities was about 9 per cent; by April, 1939 it had fallen to 7 per cent. On the other hand the cash reserves of the Imperial Bank were higher than seems at first. Taking the figures given under 'cash in hand and with the Reserve Bank', its percentage in relation to the liabilities appears to have fallen from nearly 25 per cent in July, 1935 to just under 7 per cent in April 1939. The real cash position of the Imperial Bank was, however, higher. From 1937 onwards the Bank began to keep large balances with 'other banks' and enter the amount so kept, separately, as part of its cash holdings. There had been such entries for some years but the balances were usually no more than a crore of rupees. In January 1938 they rose suddenly to over four crores and then on to a record level of Rs. 8.6 crores in April 1939, which was more than half of the Bank's total cash (Table 5).

TABLE 4

COMPARISON OF BALANCE SHEETS OF THE IMPERIAL BANK
AND THE OTHER SCHEDULED BANKS

Month	Imp. Bank: Fixed Deps. Savings Bank Current and Other Accts.	Other Sch. Banks: Total Demand and Time Liabilities	Imp. Bank: Total Advances inclg. Bills Discounted	Other Sch. Banks: Advances plus Bills Discounted	Imp. Bank: Cash in hand and with the Reserve Bank	(Rs. crores) Other Sch. Banks: Cash in hand with the Reserve Bank
July 1935	72.2	135.7	25.4	77.2	18.4	11.9
October "	76.9	140.7	20.0	66.9	19.4	17.1
January 1936	78.8	143.4	20.6	67.9	23.8	16.4
April "	78.5	143.7	25.9	75.1	26.0	14.9
July "	78.9	147.8	23.6	68.8	20.4	17.8
October "	78.8	151.9	20.3	69.0	15.3	16.2
January 1937	78.3	153.1	25.6	84.1	8.2	14.7
April "	82.8	158.3	32.1	98.5	17.2	13.9
July "	83.0	159.2	29.1	89.8	21.5	17.6
October "	81.9	161.7	24.4	87.1	15.3	16.2
January 1938	80.4	160.5	28.9	86.8	9.8	13.7
April "	80.5	156.1	35.4	96.4	6.9	13.1
July "	81.5	154.4	32.7	86.8	12.2	15.7
October "	84.3	156.5	27.5	81.4	12.4	15.8
January 1939	81.3	156.8	36.4	86.8	5.6	11.8
April "	82.3	154.7	39.7	95.1	5.7	11.7
July "	87.3	158.1	32.8	83.4	13.2	16.2

TABLE 5

(Rs. crores)

<i>Cash Reserves of the Imperial Bank ...</i>	July '35	Oct. '35	Jan. '36	Apr. '36	July '36	Oct. '36	Jan. '37	Apr. '37	July '37
Cash in hand and Balances with the Reserve Bank ...	18.4	19.4	23.8	26.0	20.4	15.3	8.2	17.2	21.5
Balances with other banks ...	0.3	0.1	0.2	0.2	0.4	0.2	1.0	1.2	1.4
	Oct. '37	Jan. '38	Apr. '38	July '38	Oct. '38	Jan. '39	Apr. '39	July '39	
Cash in hand and Balances with the Reserve Bank ...	15.3	9.8	6.9	12.2	12.4	5.6	5.7	13.2	
Balances with other banks ...	1.0	4.4	8.5	6.3	3.2	6.5	8.6	4.7	

The fact that the Imperial Bank considered these balances as equivalent to cash suggests that they were in the form of demand deposits which could be recalled at any time. But the exact reason for holding them with other banks is more difficult to guess. It is probable that the Bank bought bills in the export season in India and held the sterling accruing to them on maturity or on rediscount as deposits in London banks. But if these balances were indeed held in India, the low interest paid on demand deposits by the banks during this period (about 0.8 per cent.) and the tendency of the balances to increase during the busy season and fall in the off-season rule out the possibility that the motive of the Bank was primarily to earn something on what would otherwise have been idle balances to them. Rather it could only have been to assist the banks with its surplus resources in a manner not altogether unprofitable to it. On the other hand one finds it difficult to explain why, if this was the purpose, a balance of over Rs. 3 crores was left in the hands of scheduled banks in the slack season of 1938.

Imperial and Reserve Banks : Contrast of Policy

In any case it is clear that, compared to the other scheduled banks, the cash position of the Imperial Bank was very strong. There is reason to believe that the Bank used this position to establish itself as an important lender in the market. As early as June, 1935 the Imperial Bank took the first step to extend its influence by announcing its intention to make day to day advances

against Government securities at the Bank Rate of $3\frac{1}{2}$ per cent. A month later it reduced this call loan rate to 3 per cent. At the same time, the terms on which the Bank would give loans to the other banks were announced.¹ It was prepared to extend to them the benefit of secured loans on a call money interest basis, thereby lessening the possibility of their approaching the Reserve Bank for rediscounting their trade bills at the Bank Rate. If the banks were not interested in such day to day loans with a fluctuating rate of interest, the Bank would give them advances against Government or authorised securities, gold or silver bullion, or against demands of title thereto, at an interest rate, to be known thereafter as the Imperial Bank Advance Rate, which would be charged only for the actual period the loans were outstanding.

The result of these new call loan terms was to attract to the Imperial Bank the stock exchange brokers who were till then living on what the exchange banks and other commercial banks could spare, while the choice left to the banks to take loans either on the call-rate basis or the Advance-Rate basis helped to forge a direct relationship between these two rates. These did not become obvious for some months following, but as soon as the economic conditions began to improve in the latter half of 1936 and the early months of 1937 they asserted themselves unmistakably.² The inter-bank call money rate moved with the Imperial Bank Advance Rate so faithfully, being quoted just $\frac{1}{2}$ per cent below the other, that in a busy month like April, 1937 the Imperial Bank was able to forestall the rise of the call rate to 2 per cent by increasing its own Advance Rate first to $2\frac{1}{2}$ per cent.

The significance of this achievement cannot be under-rated. For, within the important, even if limited, dimensions of the organised money markets in India, the call loan market has occupied a position almost comparable to the discount market in London. Being localised in cities like Bombay and Calcutta, the funds within the call loan market have had a high degree of mobility and greater sensitiveness to the prevailing rate of interest than in any other section. Through the brokers and speculators, it has also been closely related to the stock exchanges and the bullion and commodity markets. Under these conditions, if a bank could have a controlling influence in the supply of funds to the call loan markets of Bombay and Calcutta, or in the rates of interest charged there, it could then be said to hold the key to the only section of the Indian money market structure which was susceptible to control and which supported a form of economic activity which in fact needed constant and effective supervision.

¹*Indian Finance*, Volume XVI No. 3., July 20, 1935.

²*Indian Finance*, Vol. XIX No. 3, January 23, 1937.

The principle of non-competition with scheduled banks, however, prevented the Reserve Bank from playing a direct part in the affairs of the call loan markets. Even if the Bank decided to avail itself of the special provision by which it was allowed to make direct loans and discounts without the mediation of a scheduled bank or a provincial co-operative bank, it must be remembered that its rate of discount was for all practical purposes a 'penalty' rate. This is a fact which has often been ignored by those who have accepted the low Bank Rate of the Reserve Bank in comparison to the 'Bazaar Bill Rate' as a proof of the rejection of the traditional Anglo-Saxon principle of penalty rates in central banking. The Bank Rate of the Bank, being the minimum at which it was prepared to rediscount eligible bills, had no significance whatever in the absence of a discount market for bills. Even scheduled banks who were entitled to take loans and advances from the Bank, found it cheaper to take them from the Imperial Bank at its Advance Rate. The Bank Rate of the Reserve Bank can therefore be described as an 'accommodation' rate only with respect to the hypothetical discount market of a future date, from which there would be a regular overflow of bills coming to the Reserve Bank and which it would rediscount at a lower rate than that prevailing in that discount market. In the circumstances existing at the time all the demands for accommodation from the money market tended to be drawn into the orbit of the Imperial Bank, and only when the resources of the Imperial Bank began to dry up was the Reserve Bank approached. It seems probable that even the one major discounting operation in the life of the Reserve Bank between 1935 and 1939, i.e., in January, 1939, was done on the initiative of the Imperial Bank when it was hard pressed for funds.

But apparently the Reserve Bank was concerned more with the development of a discount market in which it could operate freely than with establishing direct contacts with the already existing call loan markets. This attitude was, no doubt, in keeping with the spirit of the Reserve Bank Act.

Long-term Objectives

In 1936—a year after its inauguration—the Reserve Bank made a preliminary Report on the extension of the facilities of the Bank to those who, while engaged in the business of banking, were not scheduled banks, and on the methods for effecting a closer connection between "agricultural enterprise" and the operations of the Bank. This was followed in 1937 by a more exhaustive Report, as required by statute.

Both the Reports were essentially restatements of the well known peculiarities of peasant farming, its special features in India, and

of the difficulties of financing agriculture under these conditions on a commercial basis. But they revealed, a little more clearly than usual, what were the aims of the Reserve Bank and what was the maximum that could be expected of it.

The Reports divided the short-term monetary demands of agriculture into two : (a) the expenses of production, and (b) the marketing of crops. As for the first, the Bank advanced the view that the agency in charge should have an educative as well as a business side, supervising the use of the borrowed funds and ensuring that they were employed by the farmer to increase the productivity of the land. Since it would take years of rectification, consolidation and expansion before the Co-operative Movement was in a position to fill this role for the mass of the producers, it was certain that the money-lenders would have to remain as an integral part of agricultural financing. The Preliminary Report went on to claim for the money-lenders that "being on the spot they are able to advance promptly, to take risks and to make up for the lack of tangible security by personal knowledge and by using methods of recovery not open to banks or even co-operative banks".¹ As a concrete suggestion the Bank merely expressed itself in favour of "reasonable" legislation regulating money-lending and making registration compulsory for all money-lenders.

Thus, by a process of elimination, the Reserve Bank restricted its initiative to the sphere of marketing finance. Here, the main agency was the indigenous bankers who, while having no direct relations with the agricultural producers, were the financiers of the internal trade (agricultural and non-agricultural) and of the lesser industries. It was to them that the Bank turned for "linking" the indigenous and the organised money markets.

Initial Efforts

So, in August 1937, it announced a draft scheme for bringing the indigenous bankers into the Reserve System.² In brief, it suggested that the Reserve Bank would extend to the indigenous bankers facilities of direct discounting, of securing advances against Government securities, and of remittances—but only subject to the conditions that they would maintain proper books of account which would be open to the Bank, and file periodic statements with it on the lines laid down for scheduled banks. The indigenous bankers, who were already receiving as much assistance as they needed from the Imperial Bank and the other banks, dismissed the scheme out of court on the ground that no valuable privilege had

¹Report submitted to the Government of India under section 55 (1) (b) of the Reserve Bank of India Act. (1936), page 25.

²Appended to the Statutory Report to the Government of India under Section 55 (1) of the Reserve Bank of India Act (1937).

been held out by the Reserve Bank to make them go out of their way to curtail their activities and to adopt forms of business which were inconvenient to them. "Our business," wrote one of them in picturesque language, replying to the Reserve Bank, "is based on strict secrecy and it will greatly hamper our business if we make up our minds to show our account books. Besides like the Reserve Bank every other blessed bank having dealings with us will call upon us to produce our accounts at any time and the result will be, we will be at the mercy of the scheduled banks.....If the Reserve Bank wishes to do business with the indigenous Bankers on the lines of the Imperial Bank and other banks, this step will be most welcome.....but on the terms and conditions mentioned by you no banker with self respect would come to your door to have the facility of discounting bills with you"!¹

The Bank made its next attempt in 1938. Under this scheme the Bank offered to rediscount at concession rates, through the scheduled banks, the bills of approved money-lenders drawn for making advances to agriculturists against the security of produce on the condition that the benefit of the low rates was passed on to the agriculturists. But once again, no progress could be made as the scheduled banks pointed out the following difficulties in adopting the scheme :—(a) The smaller agriculturist did not usually borrow against the security of his produce, his requirements being for crop production rather than for marketing. He obtained the necessary finance for this by keeping a running account with a money-lender and would not, therefore, commit himself to bills expressed payable on a fixed date. (b) The scheduled banks were not in a position to gauge the money-lender's credit readily, nor would it be possible for them to dictate the rate of interest which the latter should charge to the cultivator against produce bills. (c) First class bills were being discounted at very fine rates owing to keen competition and there would be, therefore, little scope for scheduled banks to rediscount such bills with the Reserve Bank, and (d) The debt relief measures passed during the period of the depression had introduced an element of uncertainty into the sphere of agriculture credit.²

The idea behind the scheme was apparently to develop bill financing without the necessity of forcing any change in the business traditions of indigenous bankers. If the indigenous bankers were not attracted by the special rediscounting facilities offered to them, then perhaps the lesser money-lenders might be tempted to draw bills of exchange for discounting with the scheduled banks if the latter were given some special encouragement by the Bank to take

¹Vide *Statutory Report*, Appendix C, Letter from Seth Fatichand Gokaldas, Bankers, Madura, to the Manager, Reserve Bank of India.

²*Legislative Assembly Debates*. Volume IV No. 8, 27th March, 1946.

the initiative. The unenthusiastic response of the scheduled banks, however, meant that this door was also closed to the Bank. Incidentally it is worth noting that one of the reasons cited by the scheduled banks was the unprofitability involved in rediscounting bills with the Reserve Bank.

The possibility of a reversal of decision by the scheduled banks was ruled out by an incident that took place soon afterwards and received considerable publicity. In June 1938, the Travancore National and Quilon Bank, one of the leading banks of South India was forced to suspend payments following a run on it for several weeks. The responsibility for the disaster¹ does not concern us here so much as the attitude displayed by the Reserve Bank, as the lender of last resort, to the other scheduled banks who were affected by the subsequent banking crisis. When these banks approached the Reserve Bank for assistance against promissory notes payable on demand, the Bank pointed out that these notes were not the same as the promissory notes maturing within ninety days which it was entitled to take up for rediscount, purchase, or as security for advances. The banks then produced as security the documents whereby the goods were pledged to them, but these were also not acceptable to the Bank because, according to its interpretation, "documents of title to goods" meant, in substance, warehouse keepers' certificates. The scheduled banks therefore received little assistance from the Reserve Bank during the crisis.

The incident, though small in itself, made a deep impression on the scheduled banks. How could they get warehouse certificates, they asked, when there was no warehouse system in India? If they could receive assistance during a crisis only on conditions incapable of satisfaction, what was the purpose in their being members of the Reserve System? The real issue was whether, assuming that the Section concerned of the Reserve Bank Act was doubtful in its meaning, a liberal interpretation of it should not have been given which would have enabled the Bank to assist the scheduled banks.² With the Bank so strict and supercilious in a period of crisis, it could hardly be expected of the banks to go out of their way to discount bills drawn by money-lenders and lay themselves open to the risk of being cold-shouldered at a time of need.

Failure to develop Discount Market : Explanations

The development of bills of exchange did not make any more progress during the period of the war than in the years preceding it. Though there was a nominal expansion, by twice, of the value

¹For a full account, see Muranjan, *Modern Banking in India*, pages 285--288, 315--320.

²Letter by a correspondent, reproduced in *Indian Finance*, July 16, 1938.

of bills discounted by the scheduled banks, the real expansion was nil, as the increase was merely a reflection of the inflated prices. There were also no commercial bills in the portfolios of the Reserve Bank. Thus, after ten years of the Bank's professed patronage, the discount market seemed to be as far away from realisation as ever.

In explaining the causes of this failure it has been pointed out, as a historical fact, that the commercial bills of exchange have been on the decline for a long time, and that forces of a more permanent character than the course of trade and prices are active in retarding a recovery.¹ In support of this view has been advanced the development of the branch banking system (and its auxiliary, the telegraphic transfers of funds) which has facilitated the regional distribution of funds without the agency of bills, the improvement of transport enabling the rapid movement of goods, and the increasing popularity of loans and overdrafts which not only throw the burden of finding lenders on the buyers of goods instead of on the sellers (as in the case of bills of exchange) but can be repaid at any time without having to wait for the date of maturity.

All this is true upto a point, but, in citing it as the cause for commercial bills not developing in the unorganised sector of the Indian money market, it begs the question. For the idea of a bill market was advanced precisely for the reason that these modern influences had not penetrated sufficiently into the economy. It was assumed that there were a large number of borrowers whom the commercial banking system (including co-operative banks) could not reach, at any rate for some time to come, and that commercial bills drawn on them by the traditional financing agencies would be fluid enough to establish contact between the two sectors. The root of the problem therefore lies elsewhere.

In this connection it will be some help to compare the proposed role of the discount market in India with the functions of the London discount market in the nineteenth century.²

The London discount houses can be traced to the early bill-broking intermediaries between merchants and merchants. With the growth of country banks, which wanted some kind of investment for their surplus resources, these bill brokers became the intermediaries between merchants and banks. At this time it was the demand for bills that was insatiable, and the brokers were often paid a commission by the lenders of money for procuring bills for them.³ Later with the development of industrial areas, the supply of bills began to grow apace, and the London discount market became a kind of "conduit-pipe" between surplus and deficit areas. After

¹Muranjan, *Modern Banking in India*,⁶ page 128.

²Kiang, W. T. C., *History of the London Discount Market* (1936).

³Ibid, page 11.

the crisis of 1825, when all joint-stock banks ceased rediscounting with the Bank of England, the market underwent still another change. The banks found an alternative means of ensuring their liquidity in (a) taking more short term commercial bills from the brokers as assets, and (b) making call loans, which were even more "liquid", to the brokers. This changed procedure not only increased the demand for bills but raised the bill brokers to the stature of intermediaries between the banks in general and the Bank of England. Bill brokers became bill dealers, and an indispensable part of the money market. Therefore even when the growth of branch banking superseded their conduit-pipe functions, they were still able to maintain themselves with the aid of overseas bills which were beginning to take the place of the inland bills.

It will be noticed from this that both before and after the discount market established itself as an essential link between the Bank of England and the money market in general, the forces that sustained it and enlarged it came from the side of demand for bills and not from the side of supply. The supply developed essentially in response to the demand.

Lack of Demand for Bills

In the Indian version of the discount market, it was the function of supplying bills that was allocated to the indigenous bankers and money-lenders. They were to be the counterparts of the country banks in the industrial areas of nineteenth-century Britain, and of the later foreign traders who drew bills on London. The burden of demanding bills was on the scheduled banks and on the Reserve Bank. Viewed from this standpoint, the failure of bill financing in India can be ascribed as much to the lack of a sufficiently forceful demand for bills as to the absence of a supply of bills of the necessary quality.

The contrast between the conditions under which a market for bills developed in Britain and the conditions under which one was expected to develop in India is striking. In the former, there was a surfeit of demand for bills from the country banks in the agricultural areas who found nothing else attractive to invest their funds in. Since the problem in India was more one of seasonal rather than regional unbalance, and since the busy season coincided in almost all parts of the country, there was no counterpart to this in the form of demand for bills from one section of the indigenous bankers and money-lenders when the supply of bills from the other section was likely to be the greatest. Secondly, since the commercial banks had no direct access to the Bank of England they found it a wise policy not only to maintain their "liquidity" by holding considerable amounts of short-term bills but also to make call loans to the bill brokers who enjoyed the privilege of direct access. In India, on the other hand, the scheduled banks could

approach the Reserve Bank directly without seeking the assistance of a third party, and therefore the best guarantee of "liquidity" were assets acceptable to the Bank. From this point of view the most attractive assets were Government securities, as they could be discounted without difficulty at the Bank Rate.¹ For such call loans as they wished to make they had sufficiently attractive borrowers from the share and bullion markets.

Bills of exchange might still have made some headway as a medium of finance if they had a reasonable degree of shiftability, showing clearly the nature of the transactions behind them and the standing of the persons to whom they were addressed. The unwillingness of indigenous bankers and money-lenders to submit themselves to discipline and supervision, and the lack of a warehouse system, however, sealed off this possibility as well. It is well to remember also that even if every expectation had been fulfilled, the elasticity of monetary supply thereby achieved would have extended only to the sphere of marketing finance, and that the crucial problem of "investment-finance" for production purposes would have remained unsolved.

A Hopeful Note

It would seem that the intransigence of the indigenous bankers and money-lenders convinced the Reserve Bank of the necessity of making a new approach to the problem. In 1942 it announced a scheme under which it offered to grant accommodation to the Provincial Co-operative Banks for the marketing of crops at a concession rate (*i.e.*, at 1 per cent below the Bank Rate) on condition that the benefit of the low rate was passed on. In 1944 the Bank extended this scheme to cover also bills and promissory notes for the purpose of financing seasonal agricultural operations, and increased the rebate from 1 per cent to $1\frac{1}{2}$ per cent. The response of the banks was discouraging, but there was one significant feature about the single instance in which the facility was availed of: the Bank charged the Provincial Bank concerned at the rate of 2 per cent, the Provincial Bank charged the central co-operative bank at $2\frac{1}{2}$ per cent, the central co-operative bank charged the

¹By the strict definitions of the term 'Bank Rate', the changeover from the Imperial Bank to the Reserve Bank in 1935 did mean a change in emphasis. While the Bank Rate of the former was the rate at which it was prepared to grant demand loans against government securities, the Bank Rate of the latter was defined as the minimum rate at which it would rediscount eligible bills. But, in practice, the Imperial Bank's rate for discounting bills was the same as its Bank Rate between 1927 and 1935, while the Reserve Bank, after 1935, decided to give loans and advances against approved securities at its Bank Rate. The recommendation of the Central Banking Enquiry Committee that rediscounts should be given special preference, therefore, remained unfulfilled in substance. Vide page 76.

sale society at $3\frac{1}{2}$ per cent, and the money reached the ultimate borrower at 5 per cent.¹ It was the first time that the Reserve Bank financed a distant operation at such a cheap rate and after the money had passed through so many hands. It was an indication of what could be done in the future through the renovation of co-operative institutions.

¹*Legislative Assembly Debates*, Volume IV, No. 8, page 3015.

VII

OPEN MARKET OPERATIONS AND THE MECHANISM OF VARIATIONS IN MONETARY SUPPLY

IN view of the 'virtual' isolation of the Reserve Bank from the money markets through the normal channel of loans and discounts, the operations which the Bank was in a position to undertake on its own initiative assume considerable importance. This chapter attempts to examine the scope of these operations in the period 1935—39.

In common usage, the term 'open market operations' describes the sale or purchase of assets in the market (or markets) by a central bank with a view to effecting variations in the supply of money. Judged solely by this formal criterion not only can such operations be traced to a very early period in central banking history but it would seem that they have changed very little since. But the significance of open market operations consists not in their conformity to any particular form but in the objective which is sought to be attained through their use.

In their earliest phase, *i.e.*, in the first quarter of the nineteenth century, open market operations were confined to occasional purchases of Government securities, when prompted by the Government to do so, in order to prevent them from going to a discount.¹ Then, for a long time, sales of securities were advocated, curiously enough, with the avowed intention of relieving (instead of accentuating) stringencies in the market for loans and discounts.² The argument advanced was that by selling securities to the market the monetary authority would increase its "fund disposable for discounts" and thus help to meet the demand for them. This view of open market operations, also did not last long, and there was a reversion to the older, and more sound, interpretation that the purchase of securities increased the volume of money and that the sale of securities decreased it.

However, throughout the nineteenth century and the early years of the twentieth, open market operations were undertaken only on

¹Elmer Wood, *English Theories of Central Banking Control*, pp. 80—82.

²*Ibid*, pp. 85—87.

a very restricted scale. As Sayers remarks with reference to the operations of the Bank of England between 1890 and 1914, "the Bank had, in an extremely hesitating and not very consistent manner, solved its problem of controlling Market Rate by adopting a number of devices for reducing the supply of money in the market" but "the solution of this problem was piecemeal rather than systematic and in many ways it was unsatisfactory."¹

Emergence as a Normal Technique

Open market operations came into their own, as a recognised and regular technique of monetary management only in the years after the First World War. The change was heralded by the Federal Reserve System in the United States about the year 1922. Since the Reserve System itself had been created hardly a decade earlier with rediscounting as its main function, it was natural that a controversy should develop as to the wisdom of the innovation.

The lines on which this controversy was carried on are interesting in that they reveal not only what was in the minds of the exponents of open market operations but how a compromise was finally reached. It was agreed on both sides that central banking control depended on the relation between the reserve balances available for member banks and the reserves they kept against their liabilities either by custom or by law. It was also assumed that they did in fact keep a fixed reserve ratio. If then the member banks found the proportion of their reserves to their liabilities falling they would obviously do one of two things, reduce their liabilities or go to the Reserve Banks for more reserves. But the liabilities of banks were a function of their assets—loans and advances, investments, etc.,—and if the liabilities had to be cut down the assets had to be cut down as well. The choice was therefore between maintaining the total volume of earning assets by rediscounting some of them for cash reserves at the Reserve Banks, and restricting the earning assets as the old ones matured till the old reserve ratio was established. The problem to be resolved was, what were the factors which would weigh most with the banks in making their choice?

One school of theorists believed that the banks would approach the Reserve Banks for assistance only if it was profitable for them to do so; if it was not, the banks would prefer to reduce their earning assets. From this they deduced that the rate of interest charged by the Reserve Banks on loans and discounts was of great importance in controlling the credit situation.

¹R. S. Sayers, *Bank of England Operations, 1890—1914*, pp. 27—36. Cf. De Kock, *Central Banking*, p. 213.

The other school of theorists believed that the main criterion of member bank borrowing was need and not profit. If the member banks were in need of reserves, they said, they would go to the Reserve Banks irrespective of the rates charged. Dr. Riefler, who was the strongest exponent of this theory, argued that if profit were the main motive of member bank borrowing the money rates in the open market should be dominated by the discount rates of the Reserve Banks.¹ But instead changes in the credit situation had generally appeared first in the open market rates and later the discount rates of the Reserve Banks had adjusted themselves to them. This could be explained "only on the assumption that the whole range of rates is corresponding to forces throughout the market", which common influence he identified as the volume of Reserve Bank credit. The logical conclusion was that open market operations were a more effective method of controlling member banks than discount rates.

But having said that, Dr. Riefler himself went on to indicate a basis for compromise, which in due course came to be generally accepted:² "Because of the hesitation of individual member banks in borrowing at the reserve banks and their prompt repayment of such borrowing as is necessary through withdrawals from the open markets," he observed, "changes in the aggregate volume of indebtedness at the reserve banks are the most important single factor in fluctuations of money rates in the market. The absolute volume of this indebtedness, furthermore, is one of the most important factors in the level of money rates and probably the most important factor in the margin between money rates in the market and discount rates. The discount and acceptance rates fixed by the reserve banks are, however, equally important as stabilising factors in the money market as well as in determining the general level of money rates and the range within which fluctuations which result from changes in the volume of member bank indebtedness are confined."

The function of open market operations, as conceived at this time, was therefore to assist in bringing the rates of interest charged by member banks in the short term money market under the control of the Reserve Banks thus supplementing the influence exerted by their discount policy. The control of the long term rates was visualised, if at all, as an indirect one through the short term rates.

Enlargement of Scope

However, with the increasing emphasis in monetary theory on the long term rate of interest, it required only one step further to

¹Riefler, *Money Rates and Money Markets in the United States* (1930).

²*Ibid.*, page 16.

fit open-market operations into a larger technique of monetary management aimed at influencing directly the markets for long-term loanable funds. This took place in 1931 when Britain went off the Gold Standard and decided to inaugurate a period of cheap money.

The method adopted may be outlined briefly.¹ To begin with, the Bank of England purchased securities in the open market for several million pounds. This increased the cash reserves of commercial banks and enabled them to create bank credits with multiplied effect. The banks were thus left with the potential power to decide, through the distribution of their assets, who should benefit most from the increased funds at their command. But due to the depression the supply of short-term commercial bills was very limited, and the authorities, who were in a position to dictate to the short-term market through the supply of Treasury Bills and the conditions attached to them, stepped in to bring the short rates to extremely low levels. Thus the banks were driven to seek investments in long-term securities. By timing large-scale Government loan operations to coincide with this pressure for investments, the authorities succeeded in getting nearly three quarters of the increase in the credit creations of the banks diverted to the purchase of gilt-edged securities. The competitive character of the transactions in the capital market, as well as the significance that the interest rate on gilt-edged bore in relation to the other rates led rapidly to a general fall in the long-term rates of interest.

There are two matters of interest worth noticing in this technique. The first is the role of commercial banks in intensifying the impact of open market operations on the supply of loanable funds. It would not necessarily have been impossible to produce the same ultimate effect if such an intermediary agency were not available, or if the cash reserves injected into the open market did not reach the banks, but it would have certainly made it necessary for the initial operations to be undertaken on a much larger scale.

The second—and this is more significant—is the fact that *it leaves no basis for drawing any sharp distinction between what, in strict central banking parlance, is called open market operations, and the loan operations of the Government (short- and long-term) carried out by the central bank as its agent.* In point of legal form it is true that the two kinds of operations are entirely different from each other, which, in turn, is reflected in the manner in which they register themselves on the balance sheets of the central bank. Open market operations, undertaken by it on its own account, imply expansions or contractions of its aggregate assets-structure and therefore of its total

¹Y.C.Ma, *Technique of Government Borrowing* (1943), an unpublished Doctorate thesis of the London University.

Also W. A. Morton, *British Finance, 1930-40* (1943).

liabilities, but loan operations, when undertaken by the same bank on behalf of the Government, cause only shifts of its liabilities from the public to the Government or *vice versa*. But this formal distinction does not take note of certain important facts which follow from the unique relations between central banks, wherever they exist, and the respective Governments.

In the first place, the Government is a customer whose demand for funds, when in difficulties, the central bank can normally neither refuse nor ration.¹ Therefore, in regard to the floating debt, for instance, while sales of Treasury Bills to the public may not by itself expand or contract its liabilities, the bank knows fully well that, if the continuation of such sales becomes difficult for some reason or other, the alternative is a direct loan to the Government, either by the purchase of Treasury Bills on 'tap' from it or through straightforward 'loans.' The same alternative presents itself also when a Government has a number of long-term loans maturing at frequent intervals and requiring to be replaced by or converted into fresh loans from the market. Therefore, every borrowing operation of the Government presents, in effect, the question whether it shall be from the public in which case the total liabilities of the central bank will remain constant, or whether it shall be from the central bank in which case they will most certainly expand. Taking into account then the fact that the central bank is also the Government's banker and financial adviser, it is clear that, in the hands of the central bank, the loan operations of the Government can be as powerful 'open market operations' as any other. The central bank has, in practice, considerable latitude in deciding whether a loan should be floated at a particular time, if so for what amount and on what terms, and how much it should itself contribute to it.

It is also usually neglected that a debt operation of the Government can cause any, or all, of the following immediate effects in the market : (a) shifts of cash reserves between the banks and the central monetary authority, (b) changes in bank holdings of government obligations which increase or decrease their deposit liabilities by equivalent amounts, and (c) changes in the holdings of non-bank investors which affect their cash reserves.² Therefore, if the operations are closely spaced they can be systematically and effectively employed to make 'quantitative' adjustments in the market. This is the "open market value" of a Government's short-term loans.

¹F. W. Paish, British Floating Debt Policy, *Economica*, Vol. VII. No. 27., August 1940.

²A. C. Wallich, Debt Management and Economic Policy, *American Economic Review*, Volume XXXIV, Number 2, June 1946.

This "value" can be enhanced considerably, under certain conditions if, by agreement, the average level of the Government's balances with the central bank can be raised or lowered; for, to the extent of such changes, the effective supply of money in the market will be altered even though the total liabilities of the central bank may remain constant.

The Reserve Bank's Armoury

In examining the open market operations of the Reserve Bank, we shall therefore accept a broader definition and include the sale or purchase of assets by the Bank in the market as well as the operations undertaken by it in its management of the public debt. There were, then, three ways open to the Reserve Bank to influence the money markets directly by its operations. The first was the traditional form of open market operations, and also the most straightforward—the purchase or sale of bills of exchange, promissory notes, Government securities, gold coin and bullion. As long as there were free markets in these items there was no basic obstacle to undertaking them. In India, due to the absence of a discount market the marketability of bills of exchange and of promissory notes was not high, but Government securities, gold coin and gold and silver bullion could be openly bought and sold at any time.

The Reserve Bank's second instrument of operation—the purchase or sale of sterling—can be traced to its function of maintaining the rupee-sterling exchange rate, but more directly, it was derived from its responsibility for meeting the foreign exchange requirements of the Government. In discharge of this responsibility the Bank had to buy sterling from the scheduled banks which were engaged in the financing of the exports from India. These scheduled banks acquired export bills in the busy season from October to March, and, as their cash reserves were depleted in the process, the sale of sterling to the Reserve Bank was, to them, the obvious means of replenishing them. The Bank had two methods of purchase; either by calling for tenders each week up to an amount previously announced, leaving to the banks to declare the rates at which they would sell sterling, or, by accepting offers of sterling from the banks at rates laid down by the Bank. According to the Constitution the Bank was under obligation, as we have seen, to buy sterling in India at a rate not higher than $1s. 6\frac{13}{16}d.$ for a rupee and sell sterling at a rate not higher than $1s. 5\frac{49}{64}d.$ for a rupee provided the amounts demanded at a time were not less than the equivalent of £10,000; but between these two limiting points the Bank was free to buy or sell sterling at any rate it liked. Thus, through the amounts of sterling purchased from week to week and through the rates at which they were

purchased, the Reserve Bank was in a position to influence the cash reserves of the scheduled banks.

But there were also distinct limitations in using them as normal open market operations. Firstly, the amount of sterling available in the market at any particular moment was largely determined by the state of the export trade in the preceding period. The extent of the purchases as well as their timing were therefore outside the Bank's control except within certain limits. Secondly, even at a time when there was sufficient sterling in the market, the response of the market was dependent on the state of the cash reserves of the scheduled banks concerned. For this reason when there were regular weekly purchases, it was the scheduled banks which had the final say in the week-to-week tenders. This was commonly reflected in sterling tenders which alternated between good and bad from week to week ; the stringency of one week produced favourable offers of sterling, but the relief which this brought led to less favourable offers the following week. This made it impossible for the Bank to use sterling purchases as a means of underlining or counteracting any special feature that it might notice in its day-to-day stewardship of the money market. Thirdly, under the conditions in which India found itself in the post-depression years there was no question of selling sterling securities to the market for contracting the supply of money. On the whole, the sterling purchases were probably more comparable to discounting than open market operations.

Thirdly, the Reserve Bank was in charge of the management of the public debt and the issue of new loans. We shall postpone the discussion of the Government's funded debt, and the effects of its maturity- and yield-structures to the following chapter. Here we shall confine ourselves to the Government's floating debt, covering three items (i) the Treasury Bills sold to the public, (ii) the Treasury Bills bought by the Reserve Bank, and (iii) the loans and advances taken from the Reserve Bank.

Capacity to Operate

As to the capacity of the Reserve Bank to undertake open market operations, it is well to point out that this is not something which can be expressed in any absolute numerical form. The resources which a central bank has, and can employ for an open market operation, will depend not only on the type of operation but also on the direction in which it is aimed to exert its influence. In the case of the Reserve Bank its powers of expanding the supply of money at any moment through the purchase of assets were limited in the first instance by the cash reserves it possessed in its Banking Department against its liabilities. It was also limited by certain legal restrictions on the assets it could acquire for the

Banking Department. The Department could not hold Government securities and other public securities to the value of more than the Bank's share capital, the reserve fund, and three-fifths of its liabilities in respect of deposits. Of these securities the amount maturing within a year, held by the Bank at any time, could not exceed the aggregate of the share capital, the reserve fund, and two-fifths of its liabilities. Similarly, securities, maturing after ten years, could not be held at any time beyond the aggregate amount of the share capital, the reserve fund, and one-fifth of its liabilities.

But these limitations were not absolute, as the Reserve Bank's potential powers of expansion against assets were limited only by the regulations relating to the Issue Department. The assets held here were gold coin and bullion, sterling securities, rupee securities and rupee coin. As the purchase or sale of rupee coin against rupee notes would have made no difference to the currency in circulation, we are left with gold coin and bullion, sterling securities and rupee securities as the three types of assets through which the Bank could, as a last resort, directly affect the market.

While it was laid down by statute that of the total amount of assets in the Issue Department, at least two-fifths should be in the form of gold coin, gold bullion or sterling securities (and gold coin and bullion together at least Rs. 40 crores in value) there was no maximum absolute limit placed to the holdings in them. Open market operations in these assets for the purpose of currency expansion had therefore potentially unlimited scope provided they were available in the market. The holding of rupee securities was however closely bound with restrictions. Firstly, the aggregate of rupee coin and rupee securities could not exceed three-fifths of the assets of the Issue Department. The Department was allowed to hand over to the Government any excess of rupee coins over Rs. 50 crores (or one-sixth of the total assets, whichever was greater) held in its tills in return for gold, bank notes or securities. Secondly, the Government of India rupee securities, which were the one form of asset that the Bank could easily acquire on demand from the Government, were forbidden in excess of one-fourth of the total amount of assets or fifty crores of rupees, whichever was higher; with the permission of the Governor-General an extra ten crores of rupees could also be held.

The powers of the Reserve Bank to deflate were also similar, depending in each case on the type of operation employed. In the first instance it could sell the sterling assets and the investments held in the Banking Department. When these were exhausted it could start disposing off its assets in the Issue Department—first its gold till the statutory minimum holding of Rs. 40 crores was reached, and then its sterling and rupee securities until there was nothing left of the latter and until the aggregate of sterling

securities and gold left were two-fifths of the total assets. Theoretically, the deflationary powers of the Bank were almost as great as its inflationary powers. It is therefore difficult to understand the complaints about the "one-sided power" given to the Reserve Bank to inflate, and the lack of symmetry between its inflating and deflating powers.¹ Lack of symmetry was inevitable in the sense that while the limits of currency expansion were infinite the limits of contraction were always finite at zero point.

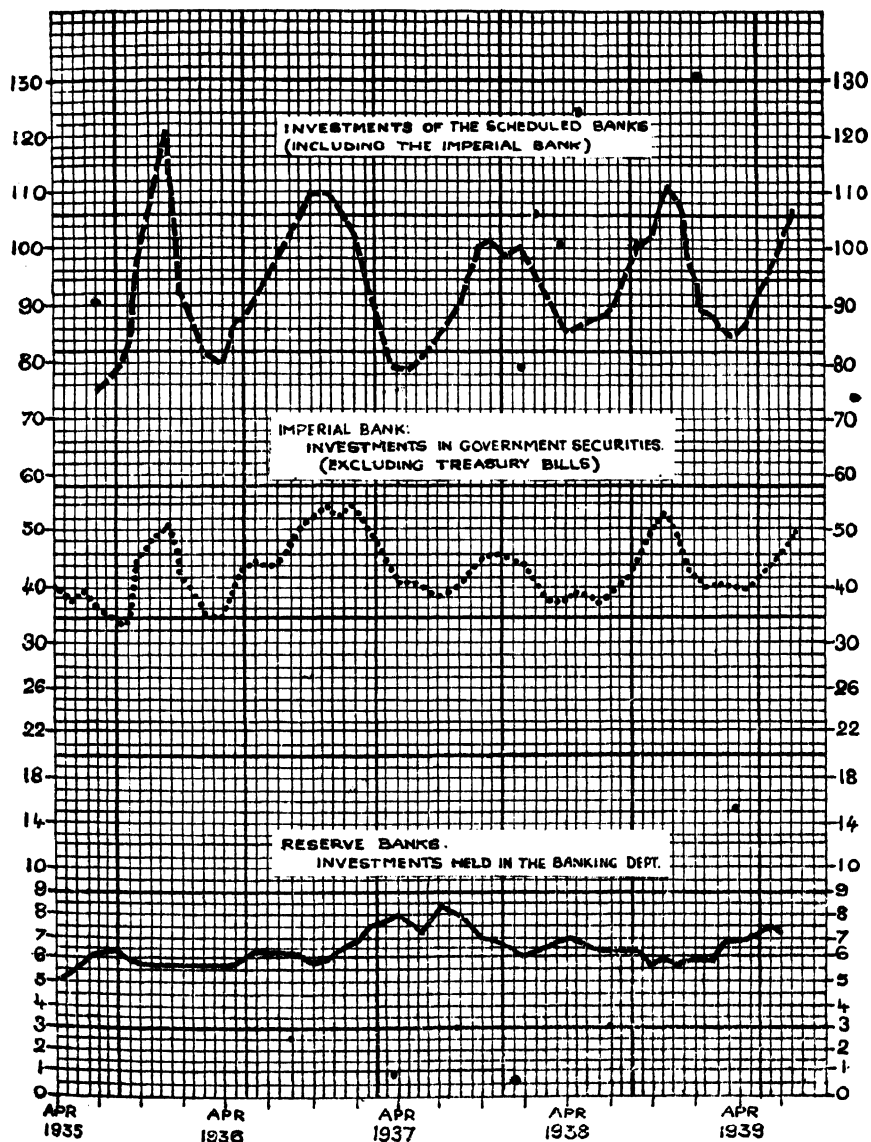
Fluctuations in the Investment Portfolio

We shall turn now to a detailed examination of the Reserve Bank's open market operations between 1935 and 1939. In Chart 1 is represented the variations in the investments held in the Banking Department of the Reserve Bank as compared to variations in the investments of the other banks. What is most striking is the relatively small range of fluctuations of the former. The Bank began its career in April, 1935 with investments to the value of Rs. 5 crores, contributed by the Government to the formation of the Reserve Fund in the form of Government securities. From this modest level they never rose above Rs. 8.3 crores in the four years and a half that followed. It is also clear that the fluctuations that did take place were not of a seasonal character as was the case with the other banks. There are two small vibrations around the months June to September in 1935 and 1936, a major hump starting in November 1936 and sloping downwards after July, 1937, and again two minor hills with their peaks in April, 1938 and July, 1939 respectively. Let us consider what each of them represented.

- (i) The increase in the holdings after June, 1935 was one of the earliest indications (or at least it was interpreted as such) that the Reserve Bank intended to pursue a policy of cheap money. At the time of its inauguration the money market was going through a spasm of stringency as a result of bull activity in the share and bullion markets. The banks were being besieged for short-term advances against gilt-edged securities, and the call money rate in Bombay which rose as high as $3\frac{1}{2}$ per cent in April was still $2\frac{1}{2}$ per cent in June. The Bank therefore entered the market and, by buying up a fair amount of these surplus security holdings, eased the situation sufficiently for the call rate to fall to $\frac{1}{2}$ per cent, in July. The Imperial Bank also gave

¹Muranjan, *Modern Banking in India*, pp. 271—272. In practice central banks have usually had a bias against deflation (and often not without good reason), but this needs to be distinguished from legal bias of which the Constitution of the Reserve Bank of India, at any rate, showed no trace.

FLUCTUATIONS IN THE INVESTMENTS OF BANKS



- some assistance. The volume of the purchases was small, but being already on the verge of the slack season it was sufficient for the purpose. In July the Bank also announced the terms of a new Government Loan. Soon afterwards, in the height of the slack season, gilt-edged prices suffered a fall due to unfavourable developments in the silver markets, but the Reserve Bank made no attempt to undertake further operations to lever up the prices. This attitude was, in turn, interpreted to mean that the Bank was not interested in gilt-edged prices as such but only in the repercussions that they produced on the money market, and at times when it had the responsibility of floating Government loans.

The occasion for the second increase in the Reserve Bank's investments was the next Government Loan floated in May, 1936 for Rs. 12 crores. Despite the fact that a large share of the loan was taken up by the Reserve Bank and the Imperial Bank together, a certain amount of stringency did take place.

- (ii) The winter of 1937 witnessed the first truly busy season that India had had for several years. Funds were in great demand, and the call rate which went up to $1\frac{1}{2}$ per cent in Bombay even as early as January rose still higher to 2 per cent in April both in Bombay and in Calcutta. Simultaneously the price of gilt-edged securities also began to fall. The Reserve Bank entered the market almost from the beginning and made more purchases of securities than it had done at any time before. It will be observed from Chart 1 that, for the first time, the purchases of the Reserve Bank were coinciding with the sales of the scheduled banks including the Imperial Bank. A policy is discernible here, namely to support the market for securities and to increase the supply of money. From July gilt-edged showed signs of gaining strength, and from this time the investments held by the Reserve Bank also began to fall.
- (iii) In the busy seasons of 1938 and 1939 the yield on Treasury Bills and the call money rates rose to very high levels, causing a general atmosphere of stringency. The increased investments of the Bank under these conditions could be interpreted either as a way of increasing the supply of money or as an attempt to support gilt-edged which was reacting adversely to the high short rates.

There was thus clearly no one thread of policy or uniformity of objectives running through the changing texture of the Reserve Bank's investment portfolio. The variations were sometimes impelled by the desire to maintain gilt-edged prices at a steady level, at other times just to pave the way for the flotation of a new loan, and perhaps, less obviously, to relieve seasonal stringency. All these strains were so closely woven together that it is really impossible to distinguish one from the other in any particular situation. What is important is that the range of variations was at no time very great.

Sterling Purchases and Treasury Bill Sales

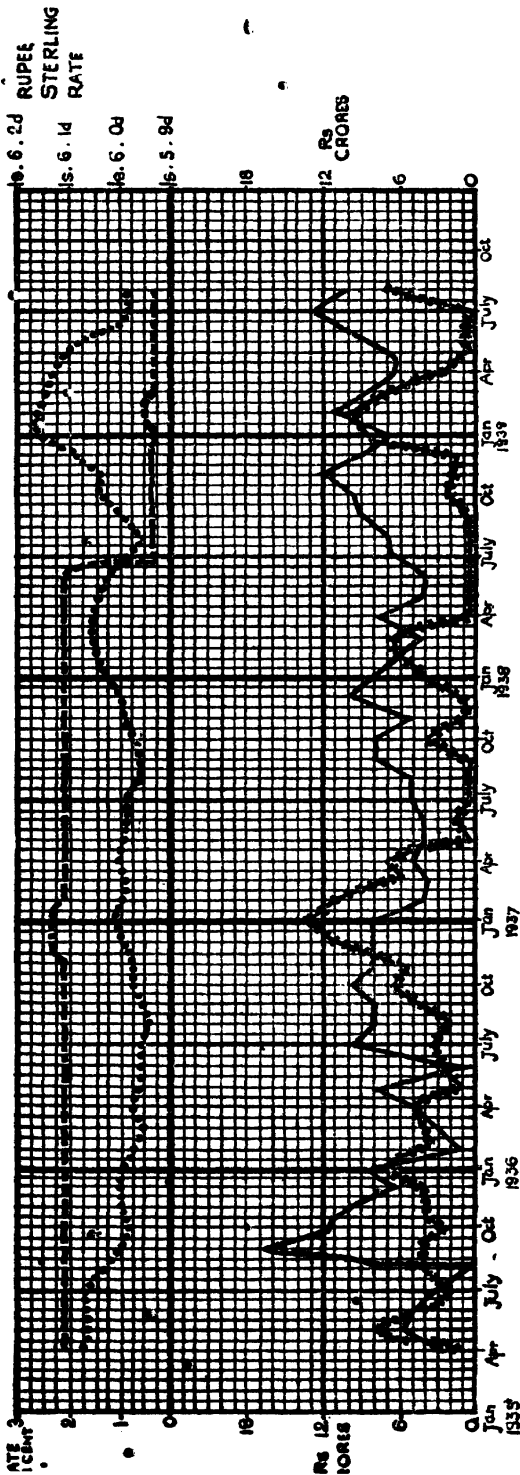
In refreshing contrast stand the purchases of sterling by the Reserve Bank on its account and the sales of Treasury Bills to the public on behalf of the Government, which not only show wider fluctuations but reveal certain interesting inter-relationships. To bring out their significance it may be useful to consider first the factors which determined the two operations prior to the establishment of the Reserve Bank.

Both were comparatively recent innovations. Though purchases of sterling in India were introduced in 1923, and the practice of issuing currency notes against *ad hoc* Treasury Bills had commenced as early as 1918, the issue of Treasury Bills to the public became a regular and accepted feature only by 1928. One can therefore speak of any kind of inter-relationship as existing between the two only after this time. The period following can be divided into the deflationary phase, 1928—31, and the "cheap money" phase, 1932—34. From 1928 the purchases of sterling in India for the annual remittances to the Secretary of State became difficult, and the Government had either to float more sterling loans in London or fall back on the sterling securities in the Paper Currency and Gold Standard Reserves. To the extent that recourse was had to the latter the currency in India had to be correspondingly contracted. In addition, currency was also contracted against the extinction of *ad hoc* Treasury Bills. The cancellation of *ad hoc* Treasury Bills had the result of reducing the Government's balances, and necessitated a quick expansion of Treasury Bills sold to the public by tender. Relief came in 1931 when Britain went off the Gold Standard and the high rupee premium on gold made India a net exporter of gold. Sterling was once again available in sufficient quantities, and further it was necessary to have more currency to facilitate the vast movements of gold which were taking place within the country. The expansion of currency was effected mainly against *ad hoc* Treasury Bills, and this enabled a simultaneous contraction of the Treasury Bills issued to the market.

SALE OF TREASURY BILLS AND PURCHASE OF STERLING

BY THE RESERVE BANK OF INDIA 1935 -39

AMOUNT OF TREASURY BILLS SOLD
 RATE OF INTEREST ON TBS SOLD
 AMOUNT OF STERLING PURCHASED
 RUPEE-STERLING RATE AT WHICH PURCHASED



But from 1932 a new situation arose when more sterling became available in India than was necessary for the current requirements. The surplus sterling purchased produced, in the first two years, a restrictive rather than an expansive effect; the receipts of the Government not being sufficient to finance the transactions recourse had to be had to borrowing from the market, and more Treasury Bills were once again sold on tender. This could, no doubt, have been avoided if the extra sterling bought had been transferred to the Paper Currency Reserve against fresh currency issued by it for the benefit of the Treasury. But, instead, the surplus balances were invested and transferred to the Gold Standard Reserve in England, and as the Paper Currency Reserve received payment for this in gold from the Gold Standard Reserve, an equivalent amount of rupee securities in the former were cancelled, leaving the balances of the Government the same as before. It was only in 1934 that this practice was changed and the surplus sterling was paid direct into the Paper Currency Reserve against fresh currency issued to the Treasury. Once again the Treasury Bills issued to the market began to decrease.

Thus the sales of Treasury Bills by tender were regulated solely with reference to the Government's balances; the purchases of sterling and the issue of *ad hoc* Treasury Bills, while having their incidence on these balances, were determined by other considerations. But with the establishment of the Reserve Bank, the linking of both Treasury Bill and Sterling transactions to the comparatively small balances of the Government were brought to an end. The Paper Currency and the Gold Standard Reserves also lost their independent existence and were merged into the general reserves of the Bank. From April, 1935 there was, in theory at any rate, a unified central reserve to bear shocks from all quarters, and the basis for any kind of relationship between the purchases of sterling and the sales of Treasury Bills would appear to have been removed thereby.

Significant Relationship in Trends

In Chart 2 is represented the amounts of sterling purchased by the Reserve Bank for its Banking Department and of Treasury Bills sold by it on behalf of the Treasury to the market, month by month, between 1935 and 1939. The rates at which the tenders were accepted are also indicated. In analysing this chart, it would be best to concentrate first on the data relating to the purchases of sterling, and then to examine those relating to the sales of Treasury Bills to see in what manner, if at all, they were correlated to the other.

The short-term variations in sterling purchases taking place in the normal run of a year, clearly reproduce themselves in a distinguishable and reasonably regular pattern throughout the

period. From December the curve rises upward in a semi-circle with its base covering three to four months before it reaches its previous level again ; then there is a transition to still lower levels which are reached between June and September, and then again the revival starts from October. This is, of course, a reflection of the seasonal trends in the country's export trade. The close dependence on the export trade is also demonstrated in the fluctuations of the sterling purchases from year to year. With the continued export of gold and the rise in commodity prices and exports due to the general economic revival, sterling could be bought in large quantities between April, 1935 and March 1937. But the recession in trade and the diminution of the gold exports in the subsequent months had their repercussions immediately on the sterling available for purchase.

TABLE 6

	Total Sterling Requirements of the Secretary of State (approx)	(In £ Million)	
		Amount Purchased in India	Balance
April 1935—March 1936 ...	27	34	+ 7
April 1936—March 1937 ...	41	54	+13
April 1937—March 1938 ...	37	25	—12
April 1938—March 1939 ...	36	26	—10

By July, 1938 the rate at which sterling was tendered was affected, and consequently the rupee began to fall in terms of sterling. This weakness in the exchange persisted till the outbreak of war.

In the case of Treasury Bills sold, there is a pattern of monthly variations discernible in the years 1935—37. There is a bulge in the curve between roughly July and December, and then it falls to relatively low levels. In other words there was an expansion of the Treasury Bill sales in the slack season and a contraction in the busy season. With the exception of the first three months in this period, the rate of interest paid on Treasury Bills was on the small side, being generally below one per cent. The whole trend, however, appears to have been reversed after April, 1937, almost simultaneously with the turn in the tide of sterling purchases. From then onwards the peak levels in Treasury Bill sales are reached in the busy season, and they are lowest in the slack season. What is more, the rate of interest paid on them soars to 1·5 per cent in the busy season of 1938 and to over 2·5 per cent in the following year. Thus the issue of Treasury Bills to the public was decreased when there was no demand for funds and when the interest rates were low, and increased when conditions of borrowing were unmistakably less favourable.

Further, apart from the seasonal variations, there was also a secular rise as is brought out in the following table showing Treasury

Bills outstanding with the public at the end of each financial year.

TABLE 7

End of Year		Treasury Bills Outstanding with the Public		Rs. crores
1933—34	33·21	
1934—35	18·27	
1935—36	12·03	
1936—37	15·98	
1937—38	18·11	
1938—39	27·34	

With the purchases of sterling on the decline and the sale of Treasury Bills by tender correspondingly on the ascent, it would appear that a situation similar to that of a decade earlier was unfolding itself. But apart from this formal parallelism the evidences are conflicting.

Conflicting Evidence

Firstly, it will be noted from Table 1 (Chapter VI) that loans to the Government from the Reserve Bank were higher in the busy season of 1938—39 than ever before, rising to nearly Rs. 6 crores. Secondly, the sales of *ad hoc* Treasury Bills by the Government to the Issue Department of the Reserve Bank were actually on the increase after April, 1937 (as is evident from the following table) ; the expansion between 1937—38 and 1938—39 was no less than Rs. 24·6 crores.

TABLE 8¹

Month		1935-36	1936-37	1937-38	1938-39	(Rs. crores) 1939
April	...	13·8	1·7	8·3	18·3	12·4
May	...	11·8	9·4	6·6	5·7	8·9
June	...	13·5	5·6	3·7 (3·8)	5·2	10·5
July	...	3·2	2·2	9·9 (9·8)	17·6	8·4
August	...	10·1	9·1	6·6	4·3	9·3
September	...	5·9	5·3	2·1 (2·0)	2·3	
October	...	4·0	2·2	7·5 (8·8)	15·8	
November	...	10·1	6·7	8·4 (7·3)	1·5	
December	...	7·6	6·6	2·1 (2·0)	6·0	
January	...	2·2	2·2	9·7	10·6	
February	...	10·8	5·9	6·0	6·6	
March	...	7·6	5·4	4·4	6·1	
TOTAL		100·6	72·3	75·3	99·9	

¹Compiled from the *Monthly Statistical Summaries* published by the Reserve Bank. In the *Statistical Summary* of April 1938 which reproduces figures for some of the preceding months there is some discrepancy from figures in earlier issues. These are given in brackets.

But, on the other hand, the expansion in the sales of Treasury Bills to the Reserve Bank did not really represent an increase in the latter's total liabilities, at any rate not to the full amount. For, in the first place, with the inauguration of the new constitution in 1937 the Provincial Governments found themselves with considerable short-term funds for investment and the Reserve Bank decided to meet their requirements from its own holdings of Treasury Bills. The amount of Treasury Bills which were transferred to the Provincial Governments and the Government of Burma in this way have not been published by the Reserve Bank. All that is known is that, at the end of the financial years 1937—38 and 1938—39, there were Treasury Bills to the value of Rs. 6.11 crores and Rs. 6.28 crores respectively outstanding with them. Since the closing stages of the financial year were not likely to have been the time when the Provincial Governments and the Government of Burma had the largest amount of funds for investment, we may assume that the Treasury Bills transferred to them through the Issue Department in the slack seasons were of a higher order than suggested by these figures. A considerable proportion of the Treasury Bills sold in favour of the Issue Department after April, 1937 must have been diverted in this fashion.¹

Secondly, the return of rupee coins from circulation, a trend which had been in evidence for several years, had continued into the period under consideration. Between April, 1935 and April, 1939 more than Rs. 28 crores of rupee coins were exchanged for notes from the Issue Department of the Reserve Bank. Of these Rs. 10 crores were handed over to the Government (five crores at a time in March, 1938 and March, 1939), under section 36 of the Reserve Bank Act, against payment in Treasury Bills.² Due to this internal shift in the structure of assets of the Issue Department, the increase in the liabilities of the Reserve Bank against *ad hoc* Treasury Bills issued to it would, at first glance, appear to have been greater than was in fact the case.

Therefore, to resolve this tangle, and to be able to assess the significance of the increase in the sales of the Treasury Bills to the public after April, 1937, it may be useful to examine the mechanism of monetary variations with respect to the Banking and Issue Departments of the Reserve Bank.

¹It is of interest to note that the amount of Treasury Bills outstanding with the Issue Department at the end of each financial year were as follows :

March 31, 1936 : Rs. 19.0 crores, March 31, 1937 : Rs. 12.6 crores.

March 31, 1938 : Rs. 13.8 crores, March 31, 1939 : Rs. 12.7 crores.

Reports on Currency and Finance issued by the Reserve Bank.

²Vide page 103.

Analysis of Bank's Balance Sheets

Of the two, the variations in the supply of money effected through the Banking Department are by far the easier to scrutinise. The preceding table, showing the important items of assets and liabilities in the Banking Department, requires very little explanation. It will be noted that, on the side of liabilities, the Capital and Reserve of the Bank has been deleted as they formed a fixed magnitude throughout the period. On the side of assets, the item 'cash' includes coin as well as the Bank's own notes, but the amount of coin held was in fact very small. The 'Balances held abroad' represent sterling held by the Department.

But the returns of the Issue Department need certain alterations before they can be made to show the changes in monetary supply effected through it. In the first place, allowance must be made for the notes issued in place of the rupee coins returned from circulation and which therefore made no difference to the total supply of money. Secondly, to the extent that rupee coins were surrendered by the Department to the Government against rupee securities (referred to earlier), the figures relating to the rupee coins held as assets in the Issue Department do not show the full extent of the amount returned from circulation, and this has to be taken into consideration as well. Lastly, the notes held in the Banking Department must be deducted in order to avoid double-counting. Full allowance is made for all these factors in drawing up the Table in the following page.

Column (1) shows the amount of sterling securities held in the Issue Department. At the inauguration of the Reserve Bank the sterling securities held in the Paper Currency and Gold Standard Reserves were distributed between the two Departments, the Issue Department receiving Rs. 48·6 crores and the other Rs. 12·0 crores. The variations after that reflect the transfers made to, or from, the Banking Department according to the state of the 'balances held abroad'. Column (2) represents the rupee securities (including *ad hoc* Treasury Bills) in the Issue Department. The last statement issued on the Paper Currency Reserve shows rupee securities to the value of only about Rs. 36 crores. The increase of Rs. 7 crores in April, 1935 must therefore be attributed to a fresh issue of *ad hoc* Treasury Bills. It can also be surmised that roughly over Rs. 38 crores of the total rupee securities consisted of *ad hoc* Treasury Bills, leaving only about Rs. 5 crores in the form

TABLE 10
MECHANISM OF CURRENCY VARIATIONS

Month	(1) Issue Dept. Sterling Secs.	(2) Issue Dept. Rupee Secs.	(3) Issue Dept. Rupee Coin	(4) Total Liabs. of Issue Dept.	(5) Notes held in Banking Dept.	(6) (Rs. crores) Currency in Circulation + April 1935
April 1935	48.6	43.0	49.9	186.0	18.5	—
July "	65.1	26.4	53.6	189.7	30.3	— 11.8
October "	66.1	25.5	58.2	194.2	33.6	— 15.2
January 1936	66.1	25.5	57.4	193.5	24.6	— 6.1
April "	67.8	23.9	59.1	195.3	23.6	— 5.0
July "	67.7	23.4	65.0	200.6	37.3	— 19.3
October "	67.3	23.4	67.7	202.9	33.3	— 15.7
January 1937	71.9	24.1	63.7	204.1	11.1	+ 11.7
April "	79.9	25.3	58.1	207.7	12.8	+ 19.2
July "	80.3	27.7	58.0	210.1	26.6	+ 7.9
October "	80.3	27.7	61.9	214.0	30.6	+ 3.9
January 1938	78.8	27.4	62.5	213.0	28.1	+ 4.8
April "	78.8	30.3	60.7	214.3	28.3	+ 2.7
July "	71.0	32.3	65.2	213.0	38.2	— 13.0
October "	62.1	32.3	70.5	209.4	31.4	— 15.1
January 1939	56.8	32.3	69.6	203.1	13.4	— 2.5
April "	59.5	34.8	68.2	206.8	15.1	— 4.1
July "	59.5	37.3	71.5	212.7	31.3	— 17.7

of longer-termed securities.¹ Column (3) gives the amount of rupee coins held in the Issue Department. As the coins return from circulation this item goes up, and it goes down as they are absorbed into circulation. Column (4) represents the total liabilities of the Issue Department and Column (5) the notes held in the Banking Department. The currency in circulation in any two months can be compared, first by deducting in each case the notes held in the Banking Department from the total liabilities of the Issue Department to find out the notes in circulation, and then by subtracting the amount by which the rupee coins in the Issue Department have increased (or adding it if the rupee coins have fallen) in relation to the month taken as the base. In Table 10, in calculating the variations in the currency in circulation, five crores and ten crores of rupees are added to the rupee coins held in the Issue Department in each month after April, 1938 and April, 1939 respectively, in order to make due allowance for the amounts surrendered.

Mechanism of Variations in Monetary Supply

We can now combine Tables 9 and 10, to get a complete picture of the mechanism by which variations in the supply of money took place. Between April, 1935 and May, 1937, the sterling securities in the Issue Department rose steadily from Rs. 48·6 crores to Rs. 80·3 crores. Though this was a period of considerable sterling purchases, the 'balances held abroad' in the Banking Department did not rise either so steadily or so steeply. Obviously the excess sterling purchased was transferred to the Issue Department at frequent intervals. Side by side with this expansion of the sterling securities went the contraction of the rupee securities in the Issue Department, but the two did not exactly offset each other. So there was a net increase in the liabilities of the Issue Department. The total deposit liabilities of the Banking Department were also

¹The method of calculation is as follows. Assuming that the *ad hoc* Treasury Bills issued to the Bank were either renewed or cancelled at the end of three months' maturity, we can trace from Table 8 how much were in fact cancelled during the year 1935—36. The Treasury Bills issued in April would have been renewed in July, those issued in July renewed in October, and so on if the flow is to be kept constant. Now it is clear on close examination that in the three months July, August and September there was a deficit in the renewals amounting to over Rs. 19 crores, but after that the variations in Treasury Bills issued in each three-monthly period equals exactly the total of the previous three-monthly period, thereby also justifying our earlier assumption. The fact that we have no figures on the three-month period preceding April does not affect this conclusion, as we start from the fixed point of April and are noting the fluctuations around that point in the following months. It can also be seen from Table 10 that the fall in the rupee securities held in the Issue Department coincides with our figure of Treasury Bills not renewed by the Department. So we may take the Treasury Bills outstanding on March 31, 1936, i.e., Rs. 19 crores, and add the amount cancelled in the course of the preceding twelve months to get the Treasury Bills outstanding as on April 1, 1935.

increasing till well into the middle of 1936, as the continued purchases of sterling from the banks enabled them to accumulate their balances with the Department. But as the banks did not draw on these balances, the increase in note-issue simply swelled the cash reserves held in the Banking Department. Moreover, there was also a steady inflow of rupee coins from circulation. Thus till January, 1937 the increase in total monetary circulation over the level in April, 1935 was negligible.

In the next three months, however, the monetary circulation reached a peak. The banks were drawing on their balances, with the result that the notes held in the Banking Department began to fall rapidly. At the same time the balances of the banks did not themselves fall absolutely due to the continued purchases of sterling by the Reserve Bank.

Then, for eight months from April, 1937, the sterling securities in the Issue Department remained constant as the 'Balances held abroad' in the Banking Department slowly went down. The rupee securities held were more or less steady and so there was no contraction of the total liabilities of the Issue Department. In fact they expanded against rupee coins returned from circulation. The decrease in the circulation of money in this period was therefore largely due to the accumulation of notes held in the Banking Department after the busy season of 1937. From October onwards the balances of the banks also began to fall as the next busy season approached and as the opportunities of replenishing them through sales of sterling to the Reserve Bank diminished.

From January, 1938, the sterling securities held in the Issue Department started to fall, registering in the next twelve months a decrease of Rs. 22 crores. They were being transferred to the Banking Department as the sterling balances held by it were not sufficient to meet the requirements in London. But there was no attempt to have them replaced by rupee securities. The slight increase in them was the result of the surrender of rupee coins to the Government. Therefore, with the beginning of the busy season of 1939, not only did the balances of the banks fall to the low level of Rs. 11.6 crores but the notes held in the Banking Department were themselves reduced to Rs. 13.5 crores.

Conclusions

In the light of these facts, two explanations may be suggested for the increase in the sales of Treasury Bills to the public after 1937. Firstly, it might be that the purpose was deliberately to raise the yield on Treasury Bills by offering more of them at a time when the balances of banks were steadily diminishing, and thereby to attract capital from abroad for investment in them. It will be noticed from Table 9 that after April, 1937 there was,

in fact, an increase in the average level of Government balances held with the Banking Department. The significance of this did not go unobserved, or uncommented on, by contemporary observers. As early as January, 1938, 'Indian Finance' referred to the yield on the floating debt being "out of all relation with conditions in the local money-market", and explained: "So long as Treasury Bill rates are maintained at a level at which they leave for foreign funds a deal margin of profit over and above the rates ruling in London and the cost of the twin operations in the exchange market, the authorities will be able to secure their weekly requirements of sterling without having to depend upon the emergence of a genuine expansion of exports." From Chart 2 it is evident that if this was the objective it was perhaps not altogether unsuccessful.

Secondly, it is well to remember that, by statute, at least two-fifths of the assets of the Issue Department had to be in the form of gold coin, gold bullion or sterling securities. The amount of gold coin and gold bullion held by the Department was constant at Rs. 44.4 crores throughout the period. Therefore, if the sterling securities fell by another Rs. 19 crores below the level in January 1939, the Bank would have faced the necessity of contracting its liabilities at the rate of five to two. It was a natural precaution, under these conditions, not to incur fresh liabilities which might increase the demand for notes.

The increase in the sales of Treasury Bills along with the diminution in the purchases of sterling may therefore be said to have been designed with a double purpose: first, to attract more sterling into the country to be able to maintain the exchange rate, and second, to avoid expanding the liabilities of the Issue Department of the Reserve Bank.

To conclude, the open market operations of the Reserve Bank were on a very modest level throughout the period in question. This was perhaps unavoidable when the elasticity of note-issue of the Bank was so closely tied to the balance of payments of the country,

VIII

THE BANK AND THE CAPITAL MARKET

THIS chapter deals with the relations between the operations of the Reserve Bank and the demand and supply of long-term (including medium-term) loanable funds.

The demand for long-term loanable funds, taken independently of the Governmental demand, may be described as essentially a demand for purposes of investment derived from the expenditures on consumption. Similarly, the supply of funds, at any moment of time, may, given the neutrality of the monetary system, be said to consist of (a) past savings, hitherto maintained in liquid form, seeking investment for the first time, (b) past investments recently converted into liquid holdings, now attempting to find alternative investments, and (c) the current savings.

With the establishment of the Reserve Bank, the conditions of supply as well as of demand became amenable of its influence to some degree. In the first place, the Bank had the power to take off securities from the market by directly operating in it and thus set free the funds hitherto invested in them. Secondly, either by this or by alternative means, the Bank could expand the cash reserves of the banking system and direct its increased potentialities for creating liabilities against itself to the purchase of more securities.¹ These operations could of course be effected in the reverse direction as well. On the side of demand, the Reserve Bank, being the main adviser to the Government on financial matters, had considerable control over the management of the Government's funded debt. The ultimate responsibility for all decisions lay with the Treasury, but the Bank could, in practice, decide the maturity-structure of the debt (*i.e.*, when and by what quantities the loans should mature), the yield on the loans, and the timing of the operations.

It is proposed to examine in the following pages the policy of the Reserve Bank in this field, in so far as one is discernible from its operations. First we shall consider the determining factors in the demand and supply of long-term loanable funds, excluding those introduced by the banking system, in the period under review. We shall then devote some space to the changes in supply

¹Vide p. 99.

caused by the intervention of the banking system (including the Reserve Bank). Lastly, the loan operations of the Government of India will be analysed in detail.

Impact of Depression on Investment Stimulus

When we deal with activities that are conceived on a long-term basis it is safer not to restrict ourselves to the period in question but to look back a little to see what went before. We shall therefore set our discussion in the context of the agricultural depression which hit India with great severity after 1929, and examine (a) the effect of the price fluctuations caused by it on incomes, and (b) the effect of the price and income fluctuations on consumption expenditures. These should give a clue to the stimulus there was in the system to investment outlay. As statistical information on these matters is meagre, the analysis must, however, take the form of deduction based on known data.

(a) In broad terms, the net income of a producer can be said to be the result of three factors, only one of which is the price received for his product. The other two are the costs incurred in production and the volume of production. If a fall in the price of the product corresponds with an equal fall in the costs of production of the marginal units the producer will try to maintain his output so that his net income may be unaffected. But if the price fall is steeper than the fall in marginal costs at a given level of output, the net income can be maintained either by reducing the output and thereby reducing total costs or by expanding the output and thus increasing the total receipts, the choice depending on the ratio of supplementary to prime costs. The net incomes on the basis of the same output will increase if, on the other hand, the fall in the costs of production of the marginal units is steeper than the fall in prices; the incentive to expand the output in this case, will, as before, depend on the ratio of the supplementary to the prime costs.

The basic feature of the depression in India was that the prices of the agricultural products fell more than those of the non-agricultural products. A situation was therefore created in which the agricultural producers found their prices falling faster than their costs, and the non-agricultural producers with their costs falling faster than their prices. Since an overwhelming proportion of the costs of the small farmers consisted of the expenses of maintaining themselves and their families (i.e., high supplementary costs) it was reasonable that they should expand their output and increase the total receipts rather than reduce the costs which would have meant a still lower standard of living. But, with certain exceptions, the increase in agricultural production in India

was not sufficient to counter the effect of the fall in prices which was on average about 50 per cent. of the 1929 level. It has been estimated that the production did not rise more than 6 per cent over the average level of 1925—29.¹ Thus the incidence of the falling prices fell squarely on agricultural incomes. But the relationship between prices and costs was favourable to the non-agricultural producers, and the ratio of their supplementary costs to prime costs was also smaller. Their incomes were therefore left to be determined by the third variant, namely the volume of production. In some cases technical factors impeded further expansion of production, but more often the trouble was due to the falling off in the demand for the products concerned. Producers who catered to the demand of the affected agricultural population therefore found it difficult to increase their incomes appreciably despite the favourable relationship between prices and costs.

The significance of the dual cost-price relationship is that to all those whose incomes contracted as a result of the catastrophic fall in prices between 1929 and 1931 the mere reversal of that trend in 1933 was by itself no relief. The prices of non-agricultural products were outpacing their costs of production just as they were lagging behind in the earlier phase; on the other hand, the prices of agricultural products were rising slower than their costs of production. Under these conditions only those whose production was based on a favourable foreign demand or on the demand of those whose consumption within the country was increasing could benefit from the so-called revival.

(b) To trace the effects of these fluctuations in income of the different classes of producers on their consumption expenditures, we have to depend almost entirely on the deductive method of analysis. We may do this by dividing the income recipients in a manner that seems the least arbitrary—namely, into those who had a shock-absorbing margin of savings to start with, and those who were even normally on the margin of subsistence. By far the larger part of the agricultural producers, as well as many non-agricultural producers, would fall into the latter class. In their case, then, a reduction in consumption expenditure was inevitable with a fall in income even if in some cases a cut in real consumption was resisted. But the issue is in doubt in the case of the normal savers. It is safe to assume that they maintained their consumption in real terms, but it is probable, if they had a high elasticity of demand, that they even increased their consumption expenditure, at the expense of a smaller volume of savings. The same is true also of those whose incomes either remained stable or were

¹P. B. Ray and H. C. Sinha, Index of Business Activity in India, *Sankhya* (Indian Journal of Statistics), Volume V, Part 2.

increasing; we can trace their consumption expenditures only if we know their elasticities of demand. However, in view of what is known about the distribution of incomes in India, we may say that the prospects of a substantial increase in consumption expenditure were small until there was an increase in the incomes of those who were on the margin of subsistence. In other words, there were groups of income earners which were able to sustain themselves by the incomes and consumption expenditures within those groups but whose narrowness prevented them from initiating a general recovery.

The instability which would be inherent in a situation of this kind receives confirmation when we examine the development of the major industries in India during the period 1929—1937. Both the jute and the tea industries were at the mercy of foreign demand, and as this fell, they were more and more driven to find comfort in the uneasy fortunes of the various national and international restriction schemes for curtailing output. The cotton textile industry no doubt made rapid strides in production after 1929, thanks to the increasing economic nationalism and the declining foreign competition. But the outlook was unhealthy on account of the reduced internal purchasing power, and the progress came to an end with the revival in foreign competition and the accumulation of unsold stocks in the market. The coal industry was handicapped by certain technical difficulties in production as well as by the fall in the demand from the other industries, particularly the railways. Iron, steel and cement were the only industries to make any headway, but they too depended more on displacing foreign sources of supply through high tariff protection rather than on fresh demand.

Under these conditions the net increase in investments was necessarily small, as will be evident from Table 11 showing the subscribed capital of joint-stock companies working in India, year by year, from 1928—29 to 1936—37.

Reference must be made however to a form of investment activity which does not find a place in this table, namely the building of houses. This was very popular with the fixed-income classes after 1931 and was probably the main outlet for their increased savings. But as they were undertaken on a private individual basis, not only did they make no impression on the organized investment institutions but left no statistical record behind them.

Supply of Savings

Turning to the other side of the equation, the supply of loanable funds, exclusive of changes introduced by the banking system, would consist, as mentioned earlier, of three elements. Of the

TABLE II
SUBSCRIBED CAPITAL OF JOINT STOCK COMPANIES AT WORK IN INDIA¹

	(AT THE END OF EACH YEAR)										(Rs. crores)
	1928—29	1929—30	1930—31	1931—32	1932—33	1933—34	1934—35	1935—36	1936—37		
Banking, Loan and Insurance Companies ...	46.9	49.1	45.8	49.2	49.4	55.5	58.9	57.7	60.2		
Transit and Transport ...	21.5	22.1	22.4	22.5	22.4	23.1	23.2	23.5	23.6		
Iron, Steel and Shipbuilding	3.2	3.2	3.3	3.3	3.2	3.8	4.0	4.0	4.0		
Public Services ...	15.8	16.1	16.3	17.1	17.9	18.5	19.4	19.8	19.9		
Cotton Mills	43.5	42.8	36.4	37.4	38.6	37.7	37.6	38.2	38.4		
Jute Mills	16.9	17.1	17.6	18.4	18.6	18.8	18.2	18.5	19.3		
Tea and Other Plantations	13.9	14.3	15.3	15.4	15.4	15.4	16.2	16.2	16.0		
Mining	22.2	22.4	22.5	22.0	22.0	23.8	23.2	23.8	23.0		
TOTAL OF ALL COMPANIES	285.4	293.3	283.8	289.9	292.8	310.6	316.2	314.0	325.0		

(Compiled from *Joint Stock Companies in India*, published by the Department of Commercial Intelligence and Statistics, Government of India)

¹Excluding Burma, but including companies incorporated elsewhere.

first of these—past savings, hitherto maintained in liquid form, entering the capital market for the first time—there is no available evidence on which we can form an opinion. But it is possible to cite at least two ways in which savings, invested in other ways, were converted into liquid holdings in the depression years. Firstly, the fall in prices and the general slackening in trade released funds which were then employed in the transport of goods, holding of stocks, etc.

Secondly, while the export of gold from India after 1931 gave short term employment to idle funds, it also increased the volume of funds trying to find alternative investments. There has been considerable conflict of opinion on the nature of these gold exports, some interpreting them as a distress signal of those living on the margin of subsistence, and others as the natural response of hoarders to the rupee premium on the price of gold. In the terms of the supply and demand of loanable funds, the former would mean that the exports exerted their influence on the demand side by helping to maintain the consumption expenditures of a vital section of the population, and the latter that the impact was on the supply side through the substitution of liquid funds for gold hoards. Since there is nothing to prove that either the one or the other was the full explanation of the phenomenon, we may assume that the truth lay between the two.

As to the third item, the volume of current savings, those who proceed strictly along the Keynesian precepts may be tempted to say that a lower national income would have reduced savings to the same degree as the original fall in investments and that therefore there could be no dearth or excess of savings. But the equality between the two magnitudes is *ex post* and not *ex ante*. What we are interested in is not what the current level of savings was in relation to current investment in different periods but what it was in relation to investment that was being planned at different moments of time. Furthermore, the equality between savings and investment has no significance for a capital market which deals only with a fraction of the total savings and investments in the community. Looking therefore at the current savings of the different income classes as the simple reciprocals of their consumption-expenditure ratios, and taking into account the class of income earners who played the most important part in the Indian capital market, it becomes clear that the depression not only need not have reduced the supply of current savings but may well have increased it. It is, of course, futile to look for statistical confirmation.

Thus there is strong ground for the presumption that within the narrow precincts of the capital market the "intrinsic" forces were such as to make the supply of loanable funds greater than the

demand for them. It is the purpose of this chapter to consider how the two factors not included in the above analysis, the changes in supply by the banking system and changes in demand on Government account, affected the situation.

Contribution of the Banking System

The expansion in the supply of money between September, 1931 (when the rupee along with the pound sterling went off the gold standard) and March, 1935 was limited by the mechanism of monetary expansion itself. As there was no central bank at this time, whose liabilities could be considered the equivalent of money, an increase in the cash reserves of the banks had to come through either the paper currency or the metallic circulation. After an initial expansion against Government of India securities as well as through the special advances to the Imperial Bank, the composition of the Paper Currency Reserve was so manipulated as not to increase the supply any further. As more sterling was bought in India than was required for the annual 'Home charges', the excess was transferred to the Gold Standard Reserve against payment in gold to the Paper Currency Reserve and a corresponding amount of the Government of India securities extinguished. It was, as noticed in the last chapter, only after 1933 that this system was changed and the paper currency allowed to rise along with the excess purchases of sterling.¹ The following table summarises these variations in the Paper Currency Reserve as well as the extent of the return of rupee coins from circulation.

TABLE 12

	PAPER CURRENCY RESERVE				Total	(Rs. crores)
	Govt. of India Securities	Advances to the Imperial Bank	Gold	+ Expansion — Contraction Sterling Securities		METALLIC COINS + Absorption • — Return
Oct. '31—Mar. '32 :	+39.2	+7.0	+1.1	..	+47.3	(Not available)
Apr. '32—Mar. '33 :	—19.8	—9.4	+20.7	..	— 8.5	—7.5
Apr. '33—Mar. '34 :	—23.8	..	+15.5	+ 8.2	— 0.1	—0.3
Apr. '34—Mar. '35 :	— 4.0	..	..	+10.0	+ 6.0	—3.2

In the last chapter we have discussed in detail the variations in monetary supply after 1935. Combining the two it becomes obvious that the total increase in the supply of cash reserves between 1931 and 1937 was in the neighbourhood of Rs. 66 crores.

¹Vide p. 107.

This increase does not represent by itself the increased supply of funds in the capital market. In fact an expansion in the supply of cash reserves has no direct repercussions on the supply of funds in the capital market except under two conditions (a) the expansion is done by the purchase of securities hitherto held by the market, and (b) the cash reserves of the commercial banks are increased and thereby also their ability to buy more securities. As we have seen, the actual purchase of securities by the Reserve Bank from the market was negligible. We are therefore left with the commercial banks as the chief source of increased supply.

There is no continuity of statistics on the cash reserves of all the commercial banks, and so we shall content ourselves with an examination of the balance-sheets of the Imperial Bank and the so-called 'Big Five' Indian joint-stock banks at the end of each year from 1931 to 1938.¹

TABLE 13

Year Dec. 31	IMPERIAL BANK			THE BIG FIVE			TOTAL		
	Cash	Total Deposit Liabilities	Invest- ments	Cash	Total Deposit Liabilities	Invest- ments	Cash	Total Deposit Liabilities	Invest- ments
1931 ...	11.0	72.2	30.3	6.1	49.9	18.4	17.1	122.1	48.7
1932 ...	21.0	75.4	32.0	7.0	56.7	20.8	28.0	132.1	52.8
1933 ...	18.6	80.6	47.0	8.6	57.4	26.6	27.2	138.0	73.0
1934 ...	19.0	81.0	41.6	6.5	60.4	26.6	25.5	141.4	68.2
1935 ...	19.6	79.1	46.9	7.1	65.2	24.1	26.7	143.3	71.0
1936 ...	8.6	78.8	52.6	11.2	70.2	28.1	19.8	149.0	80.7
1937 ...	13.4	81.2	47.6	11.6	70.0	26.5	25.0	151.2	74.1
1938 ...	9.0	81.5	43.7	10.3	72.9	27.6	19.3	154.4	71.3

The increase in the cash reserves of these banks between 1931 and 1937 was thus about Rs. 8 crores, the Imperial Bank registering its greatest progress before 1935 and the Big Five after 1935. If the banks maintained a stable cash ratio of, say, 10 per cent and kept the value of their other assets constant then the supply of funds in the capital market would have increased by Rs. 80 crores. But, as is obvious from the Table, while the banks did not increase their other assets by an appreciable degree they allowed their cash ratio to rise, and the result was that the actual increase in their investment holdings was no more than about Rs. 28 crores.

The elasticity of their investment demand being low, the ratio between the initial increase in cash supply and the eventual expansion in the supply of funds in the capital market was necessarily much less favourable than, for instance, in Britain during the same period. In Britain, when the supply of cash

¹Muranjan, *Modern Banking in India*, compiled from Tables on pp. 97 and 181.

reserves* was increased by £120 million between 1931 and 1936 the cash reserves and the investments of the banks expanded by £48 million and £476 million respectively. In India, although the supply of cash was increased by nearly Rs. 66 crores between 1931 and 1937, the cash reserves and the investments of the banks could have expanded by no more than (after making a liberal allowance for the banks other than the Imperial Bank and the Big Five) Rs. 12 crores and Rs. 35 crores respectively. In other words, it would appear that the larger part of the increased supply of cash reserves went to satisfy the liquidity-preference of the banks themselves.

Management of Gilt-edged before 1935

Next come the loan operations of the Government of India, which after 1935 became the responsibility of the Reserve Bank. In discussing these it is not enough to consider merely the excess of borrowings over repayments or the excess of repayments over borrowings as the case might be. The period over which the loans floated were to mature, the rate of interest offered on them, the prices at which the securities were initially sold, and the time at which the market was approached—all these are potent influences which cannot be neglected in a study of this kind. In the case of India we shall also have to consider the operations of the Government relating to its sterling loans and the effects thereof. On the whole, the management of gilt-edged may be described as a technique in itself.

We shall first review briefly the loan operations of the Government of India between October, 1931 and March, 1935.

On October 31, 1931, the non-terminable loans of the Government of India amounted to Rs. 125·4 crores, of which Rs. 120 crores were on a $3\frac{1}{2}$ per cent basis. All of them were repayable at par after three months' notice at the option of the Government. The terminable loans, on the other hand, amounted to Rs. 294·2 crores, their composition being as follows : Rs. 59 crores at 4 per cent, Rs. 35 crores at $4\frac{1}{2}$ per cent, nearly Rs. 139 crores at 5 per cent, Rs. 44 crores at 6 per cent, and Rs. 17 crores at $6\frac{1}{2}$ per cent. Of these terminable* loans, over Rs. 140 crores were repayable either by obligation or at the option of the Government before April, 1935.

The nature and volume of the loans which were in fact repaid and issued during the period were as follows :—

REPAID

6 per cent Bonds, 1932	Rs. 14.63 crores
4 per cent Conversion Loan, 1945—55	„ 9.90 „
5 per cent War Loan, 1929—47	„ 19.62 „
5 per cent Bonds, 1933	„ 11.38 „
6 per cent Bonds, 1933—36	„ 20.18 „
4 per cent Loan, 1934—37	„ 19.53 „
4½ per cent Bonds, 1934	„ 13.00 „
	<hr/>
	Rs. 108.24 crores

NEW BORROWING¹

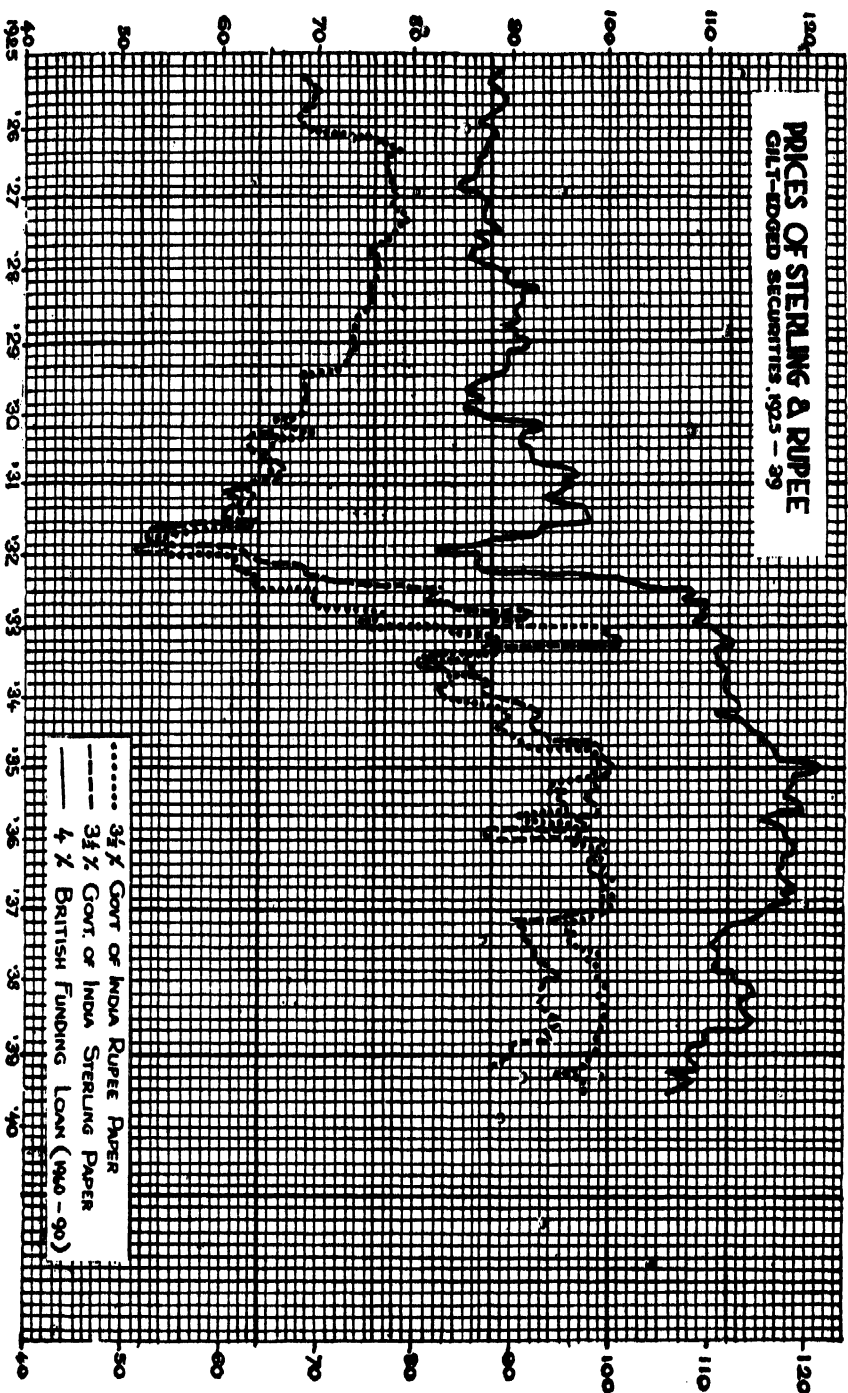
(Jun. '32) 5½ per cent Loan, 1938—40	... Rs. 19.13 crores
(Aug. '33) 5 per cent Loan, 1940—43	... „ 25.18 „
(Feb. '33) 4 per cent Bonds, 1943	... „ 14.97 „
(Feb. '33) 4 per cent Loan, 1960—70	... „ 33.81 „
(May '33) 3½ per cent Loan, 1947—50	... „ 30.81 „
(Jun. '34) 3½ per cent Loan, 1947—50	... „ 25.13 „
(Sep. '34) 3 per cent Loan, 1941	... „ 10.67 „
	<hr/>
	Rs. 159.70 crores

There were only two conversions. The first was a minor one, from Treasury Bills to 4 per cent 1943 Bonds, in February, 1933. It was a “feeler” for a second, and more ambitious operation undertaken a few weeks later, when the holders of the 5 per cent War Loan 1929—47, 5 per cent Bonds 1933 and 5 per cent Bonds 1933—36 were invited, to have them converted for a 4 per cent 1960—70 Loan. There were approximately Rs. 51 crores of these outstanding, of which nearly Rs. 34 crores were tendered

¹There were, in addition, the net receipts from the Post Office Cash Certificates and the Post Office Savings Bank.

	P.O. Cash Certs		P.O. Savings Bank
1931—32	6.2	...	1.2
1932—33	11.1	...	5.3
1933—34	8.1	...	8.8
1934—35	2.3	...	2.8
	<hr/>		<hr/>
	Rs. 27.7 crores		Rs. 19.1 crores

PRICES OF STERLING & RUPEE GILT-EDGED SECURITIES, 1925 - 39



for conversion into the new Loan. Encouraged by this result, the Government entered the market again with a Cash and Conversion Loan in May, 1933. Thereby about Rs. 15 crores of the 4 per cent Conversion Loan, 1931—36, were converted into the new $3\frac{1}{2}$ per cent 1947—50 Loan. Though these three successive Loans were responsible for the conversion of nearly Rs. 64 crores in the relatively short period of three months, and show signs of having been inspired by the spectacular conversion in Britain of £2,000 million from a 5 per cent to a $3\frac{1}{2}$ per cent basis in December, 1932, it is clear that none of them were comparable to the British experiment either in their magnitude or in the effected reduction of the yield.

The main drawback in this period was not so much the lack of sufficient investible funds as the failure on the part of the authorities to follow a consistent loans policy. The accompanying chart shows the prices of three representative gilt-edged securities, one of the British Government and two of the Government of India. They are (a) the 4 per cent British Funding Loan, 1960—90, (b) the $3\frac{1}{2}$ per cent Government of India Sterling Loan in London, and (c) the $3\frac{1}{2}$ per cent Government of India non-terminable Rupee Loan in India. It will be noticed, first, that between December, 1931 and March, 1933 the Indian sterling paper shared the benefits of the general readjustment of values that was taking place in London as a result of the cheap money policy there. From the low level of £50 the security had, within fifteen months, risen above par. But even more remarkable is the close correspondence between the prices of the Government's sterling paper in London and the prices of its rupee paper in India, the former leading by roughly two months. We cannot therefore avoid the conclusion that the improvement in Indian gilt-edged prices was very largely due to the cheap money in Britain.

If this is true, one would have expected the Government to exercise as much care in the management of its sterling loans as of its rupee loans. Yet, within a fortnight of the Cash and Conversion Loan in India (referred to above), which was heavily over-subscribed, the Government had floated a Sterling Loan for £12 million offering a yield of over $4\frac{1}{2}$ per cent. This was more than $\frac{1}{2}$ per cent above what was offered for the rupee loan, and well over $\frac{1}{2}$ per cent above what other sterling gilt-edged securities were yielding at the time. This margin may appear to be small but the result was, as is clear from the Chart, a sudden loss of market-confidence in the Indian sterling securities and a sympathetic movement in the prices of the rupee securities. It is not known how the Government interpreted this reverse, but it appears to be not an unconnected phenomenon that it did not come to the market again for a rupee loan till June, 1934. The conversion experiments thus came to an abrupt end.

It will be noticed too that every decrease in the yield offered on the new rupee loans was a source of strength to the gilt-edged prices. For instance, one of the steepest ascents took place between September and November of 1934, after a 3 per cent Loan had been floated at the issue price of Rs. 99 per cent *i.e.*, offering a yield which was over $\frac{1}{2}$ per cent below the current yield on the $3\frac{1}{2}$ per cent rupee paper. The quick adjustment of values to the new level of yields was a sure indication of the favourable condition of the market.

One more point about this pre-Reserve Bank period remains to be mentioned. Even when the outlook for securities was bright there was hesitation on the part of the banks to hold more of them as investments because there was no confidence that their prices would be maintained for any length of time. In December, 1932 the outlook for gilt-edged was promising and, as is clear from Table 13, the banks added considerably to their investment portfolios. The investments of the Imperial Bank rose by Rs. 15 crores while those of the Big Five increased by nearly Rs. 6 crores between December, 1932 and December, 1933. But meanwhile the gilt-edged prices had suddenly fallen (for reasons already pointed out) and the banks had taken alarm. The result was that when the gilt-edged prices rallied again between January, 1934 and January, 1935, the banks took the opportunity to unload considerable amounts of their holdings on the market, instead of demanding more. The investments of the Imperial Bank and of the Big Five fell from Rs. 73.6 crores in December, 1933 to Rs. 68.2 crores in December, 1934. This was considered one of the causes of the second reverse in gilt-edged prices after January, 1935.¹

Reserve Bank's Regime

Between the inauguration of the Reserve Bank and the outbreak of war there were only four new rupee loans of the Government of India.

The first was a 3 per cent 1951—54 Loan, announced in July 1935, for Rs. 15 crores at Rs. 96.8 per cent. Subscriptions were invited in the form of cash, 5 per cent Bonds 1935, or $6\frac{1}{2}$ per cent Treasury Bonds 1935. The loan was heavily over-subscribed, the subscriptions totalling about Rs. 29.5 crores. The composition of the subscription list was an indication of the state of the market.

In cash	...	...	...	Rs.	16.5 crores
By tender of 5 per cent Bonds, 1935	...	...	...	"	8.4 "
By tender of $6\frac{1}{2}$ per cent Treasury Bonds,	...	...	...	"
1935	...	...	...	"	4.6 "

¹*Indian Finance*, Volume XV, No. 16, March 30, 1935.

The explanation for the relatively low tenders of the 6½ per cent Treasury Bonds, though there were over Rs. 16 crores of them outstanding, is probably that since the Bonds were issued only four years earlier the holders were reluctant to get them converted into securities with a minimum life of sixteen years.¹ The tenders of both the 5 per cent Bonds and the 6½ per cent Treasury Bonds were accepted in full. Consequently only about Rs. 2.1 crores of the cash tenders were satisfied.

At the same time as this rupee loan, a 3 per cent 1949—52 Sterling Loan for £10 million was issued in London at £98 per cent. It is significant that not only was the mistake of 1933 not repeated but that the yield offered was less than what was being offered in India. The Loan was a success and created no complications either for the sterling or for the rupee paper.

The second rupee loan was in May, 1936. It was a pure cash loan for Rs. 12 crores bearing 2½ per cent interest and repayable between 1948 and 1952. Being medium-term and payable only in cash, the loan was popular with banks as well as with the other investment institutions. The loan was heavily over-subscribed, applications amounting to Rs. 30 crores. More than half of the loan was reputed to have gone to 'special quarters', meaning the Imperial Bank and the Reserve Bank.

It was another two years before the Government came to the market again. In May, 1938, subscriptions for a 3 per cent 1963—65 Loan for Rs. 15 crores were invited in the form of cash, 5½ per cent Loan 1938—40, or 5 per cent Loan 1939—44. The issue price was Rs. 98. Once again, subscriptions were heavy and the applications on behalf of 5½ per cent 1938—40 and 5 per cent Loan 1939—44 alone amounted to Rs. 19½ crores.

The last Loan of the pre-war period was a second issue of the 3 per cent 1963—65 Loan for Rs. 15 crores in July, 1939, the issue price being the same as before. It was stated in the announcement that while subscriptions could be made in the form of cash, 5 per cent 1939—44 Loan or 5 per cent 1940—43 Loan, preference would be given to the applications for conversions from the 5 per cent 1939—44 Loan over the cash applications and that, in any case, the list would be closed as soon as the two together amounted to Rs. 15 crores. Apparently a flood of subscriptions was once again expected. But the results were different. Tenders of the 5 per cent 1940—43 Loan amounted to Rs. 6.1 crores, while the tenders of the 5 per cent 1939—44 Loan and the applications for payment in cash were only Rs. 8.1 and Rs. 1.4 crores respectively.

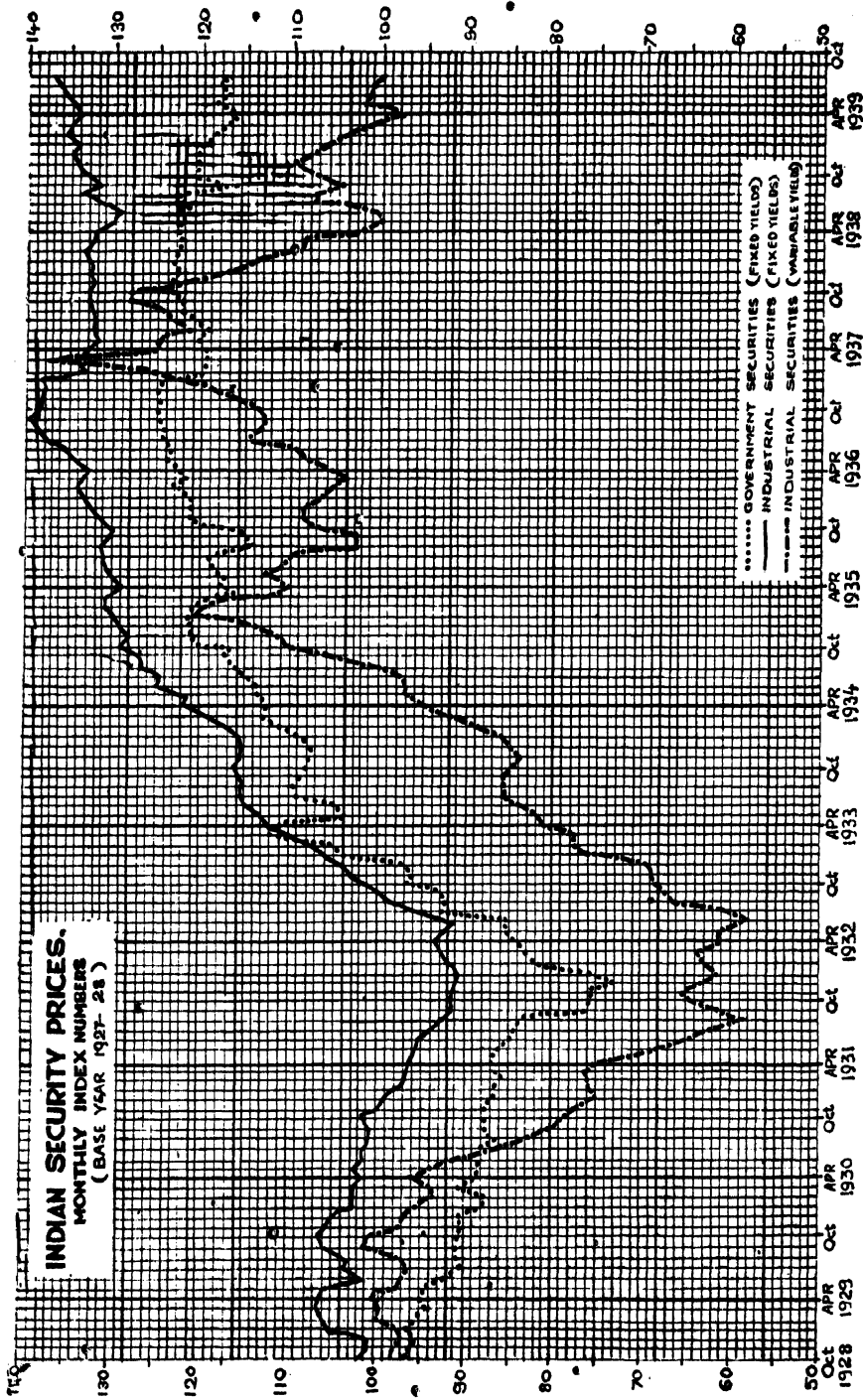
¹According to the *Indian Finance*, Rs. 10 crores of these Bonds were held by the Post Office on behalf of the investors and could not be easily withdrawn for the purpose of conversion into the new Loan.

Could Money have been made Cheaper?

The reception which these Government loans (with the exception of the last) received was in itself an irrefutable proof of the 'starved' condition of the capital market. Funds seem to have been available for the asking, either on medium- or on long-term. This was, therefore, advanced to support the criticism that the borrowing policy of the Government, and by implication of the Reserve Bank, was too timid. Was it necessary, it was asked, to pay as high a rate as 3 per cent for a medium-term loan and issue it at Rs. 96½ per cent in July, 1935? With such a large supply of sterling available from the market in India itself, why should there have been a new Sterling Loan in London at all at this time? Was it not possible to take advantage of the cheap money in Britain by converting at least some of the existing 3½ per cent sterling paper to a 3 per cent basis, and indirectly benefit the rupee paper as well? In view of the tremendous success of the 2½ per cent Loan in May, 1936 and the subsequent improvement in the price of the 3½ per cent rupee paper, what prevented the conversion of this 'non-terminable' loan to a 3 per cent level after the required three months' notice? Lastly, considering all this what was there to support the view that the transfer of responsibility regarding the Government's rupee and sterling loans to the Reserve Bank was an improvement on the previous state of affairs? "If the borrowing rate of India had steadily gone down, it was not so much because of, as in spite of, the Government", complained *Indian Finance* in 1939, "The difference between the British technique of borrowing in the last eight years and the corresponding Indian technique is that the British authorities have shaped and moulded circumstances while the Indian authorities have been shaped and moulded by circumstances."

These criticisms became particularly severe after the first quarter of 1936 when, with the weakness in sterling gilt-edged securities, the suspicion began to grow that the prices of rupee gilt-edged were being allowed to follow suit. The critics were therefore anxious to establish that the "intrinsic factors" were much stronger in India than in London, that there was no justification in tying rupee gilt-edged to the apron-strings of sterling gilt-edged, and that India could well follow an independent "cheap money" policy of its own.

It will be noticed from Chart 3 that the Indian gilt-edged prices were, in fact, following the trend of London prices throughout the period in question. As to the other points raised, it cannot be gainsaid that the Government did surprise the market in July, 1935 with the favourable yield offered on the new Loan, and it is also true that after the second Loan in May, 1936 there were general



expectations of a large-scale conversion of the $3\frac{1}{2}$ per cent rupee paper which went unfulfilled. In fact, the rumours of conversion appear to have been one of the causes preventing the price of this popular security from rising much above par. Again, there was nothing, on the face of the matter, to warrant a sterling loan in London in 1935 when the amount could have been just as well raised in India at a lower rate (with the Indian Treasury also benefitting from the taxable incomes created thereby) and remitted to London without any weakening of the exchange rate, though, in the light of later events, the gain in doing so may be doubted. Lastly, even if there is no conclusive proof, it was perhaps not impossible to carry through a conversion of the $3\frac{1}{2}$ per cent Sterling stock, and use it as a lever for a corresponding operation in India.

The accompanying chart (Chart 4), showing the trend of Indian security prices, also appears to bear out fully the validity of the criticism that by pursuing a cautious policy with regard to gilt-edged the authorities were indirectly depressing the prices of industrial securities.

The Defence

Some of the defects in the borrowing operations of the Government may be attributed simply to the lack of technical finesse, unconnected with any particular principle or policy. The liberal yield offered on the loan floated in July, 1935 may be cited as one such instance. But the general tendency, in evidence throughout the period, to keep the gilt-edged prices from rising very high cannot be explained away in this manner. The greater part of the terminable loans on a high-interest basis having been converted prior to 1935, the $3\frac{1}{2}$ per cent non-terminable stock of Rs. 120 crores was the most conspicuous security in the market, comparable in stature to the 5 per cent War Loan among the British gilt-edged securities before 1931, and the decision, neither to seek its conversion nor to make any specific statement as to the intentions, could not have been accidental.

In the first place, an important difference between the situations in Britain and in India must be noted. In Britain, once the Gold Standard was abandoned there was not only nothing to prevent a state of cheap money but every influence from abroad was such as to accentuate it. The Exchange Equalisation Account was concerned in avoiding not so much a devaluation of the pound sterling as its over valuation. In India, on the other hand, the choice was between maintaining the existing rupee-sterling rate and filling the commodity 'gap' with gold exports, and devaluing the currency in an attempt to secure the balance through the commodity payments themselves. In either case it was a precarious situation which required a close watching of the balance

of payments. Under these conditions, a policy of lowering the yield on rupee gilt-edged much below that on sterling gilt-edged, which might have caused a flight of capital from India for investment in London, could have held little attraction to the authorities. As a matter of fact, as noticed in the last chapter, the exchange-rate was maintained after 1937 partly by paying, on the local Treasury Bills, rates of interest higher than those obtaining in London and attracting capital from abroad.

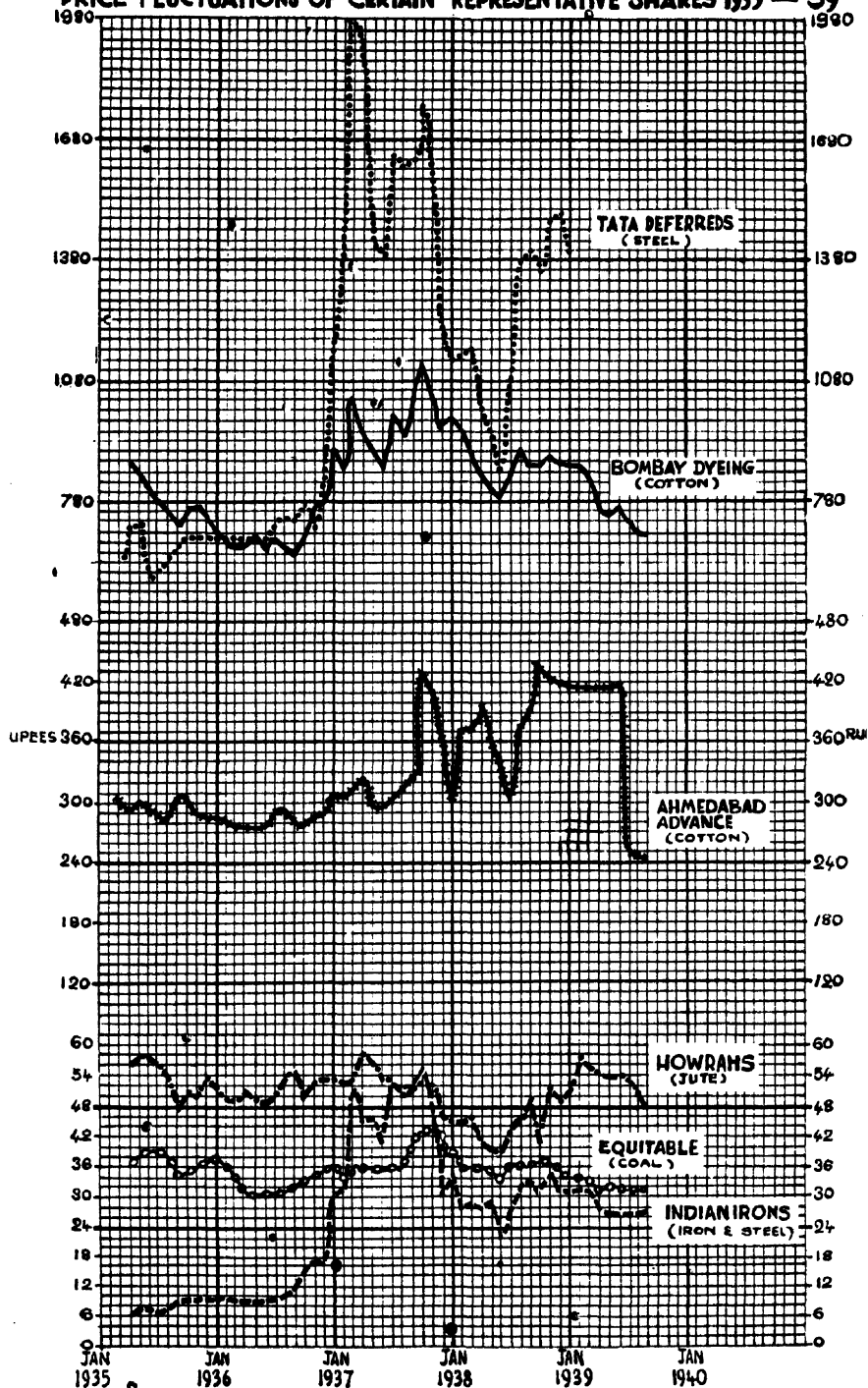
Secondly, it is well to remember that a rise in the price of gilt-edged securities had not the same significance for new issues of capital as for the existing shares and debentures. This was particularly true in India where institutional considerations connected with the flotation of capital, like the managing agency system, the lack of investment houses and under-writers, etc., had special force. Even in the demand for the existing shares and stocks in the capital market the non-volatility of funds was much greater than elsewhere. Investors who had earmarked their savings for investment in gilt-edged would require far more than the usual incentives to transfer them to industrial securities. Some might look with favour on fixed-yield debentures of established concerns, but to take interest in variable-yield securities required a leap into the future for which most of them were not prepared. To involve oneself in a new capital issue was, of course, to take one step further into the unknown. The following table, showing the capital, subscribed and paid-up, of new companies registered in India, year by year, indicates how small were the amounts involved.

TABLE 14

		(Rs. crores)
	Subscribed Capital	Paid-up Capital
1930—31	... 1.0	0.8
1931—32	... 0.6	0.3
1932—33	... 0.8	0.3
1933—34	... 1.3	0.9
1934—35	... 1.0	0.5
1935—36	... 2.0	1.1
1936—37	... 3.9	1.8
1937—38	... 4.6	1.9

Thirdly, the fixed-yield industrial securities, whose prices showed the greatest degree of correlation with those of Government securities, occupied a place of very limited importance in the Indian capital market. They constituted less than one-tenth of the industrial capital floated in the country, most of the others

PRICE FLUCTUATIONS OF CERTAIN REPRESENTATIVE SHARES 1935 — 39



being variable-yield shares. From Chart 4 it would seem that the prices of these variable-yield securities had also a close degree of correlation to the prices of gilt-edged, the time-lag and the tendency to exaggerate the fluctuations a little more being explainable by the basic characteristics of this variety of paper. But the smooth elegance of weighted averages conceals here certain vital features of the market for variable-yield industrial securities.

In Chart 5 we have introduced the mid-monthly prices of six of the most established and popular industrial shares in India, three belonging to the Bombay Stock Exchange and three to the Calcutta Stock Exchange. They are the 'Tata Deferreds', 'Bombay Dyeing' and 'Ahmedabad Advance' on the one hand, and the 'Howrahs', 'Equitable' and 'Indian Irons' on the other. Together they also cover the five main industries of India—cotton, jute, coal, iron and steel.

The first thing that will be noticed is that the Calcutta market was much less susceptible to fluctuations than the Bombay one. It is also evident that there was little co-relation between the trend of prices of the different shares except between 'Indian Irons' and 'Tata Deferreds', and to a lesser extent between 'Bombay Dyeing' and 'Ahmedabad Advance'. In other words it is impossible to trace the impact of any one influence on all the shares. The different shares were affected differently for different reasons. It is interesting, however, to note the remarkable parallelism between the curve showing the prices of variable-yield securities in Chart 4 and the curves representing the prices of 'Tata Deferreds' and 'Indian Irons' in Chart 5.

Looking at the chart one may legitimately enquire why there should have been such sharp fluctuations in the prices of at least four of the six shares. The basic reasons can, no doubt, be traced without difficulty. Early in 1937 there was a boom in all metal industries consequent on the rearmament programme, and as one international crisis followed the other they continued to display, what the market would call, 'extremely bullish outlook'. Similarly, in the case of cotton, the disappearance of Japanese competition and the Indo-Japanese Agreement were 'bullish' factors for the industry during and after 1937. But these do not explain the violence of the fluctuations. The 'Tata Deferreds' rose from about Rs. 700 in November, 1936 to over Rs. 2,200 in March, 1937 only to fall back to Rs. 1,400 in another two months. Similarly, the 'Ahmedabad Advance' fluctuated twice over a range of Rs. 100 between July 1937 and July 1938. Such frequent and violent fluctuations only indicate that a considerable section of these shares, despite their inherent soundness and integrity, had not reached the ultimate investors who would hold them for their worth but were in the hands of speculators.

The Force of Speculation

This feature of the Indian share markets arises partly from certain defects in the organisation and rules of the Stock Exchanges,¹ but it also reflects the absence of a broad, non-panicky investing public and the nature of the industrial organisation.² These have encouraged the growth of pressure groups, 'bulls' as well as 'bears', who are not interested in estimating rationally the real prospects³ of an enterprise, but only in engineering rises and falls in the prices of its shares to serve their own ends and indirectly penalising such genuine investors as there are. The "destabilising" range of price oscillation⁴ is accordingly much higher and the stimulants to speculative activity are even less justifiable.

Referring to the American share markets, Keynes once made the witticism that the Americans were apt to spend most of their time finding out what average opinion believed average opinion to be.⁴ In India, it may be said without much exaggeration, there was not even anything like an average opinion; everything depended on what a small section of interested opinion could persuade a vast mass of opinionless opinion to believe.

In the period with which we are dealing, speculation was also rife in the bullion markets. The prices of gold and silver were fluctuating due to international influences, particularly the American policy with regard to these metals, and the stocks held in Bombay varied with the changes in expectations. Large sums of money were locked up in this way.

Now the relation between speculative activity and gilt-edged was two-fold. Firstly, as long as easy money conditions persisted and there was an abundance of funds in the market trying to find investment, an increase in the price of gilt-edged securities could only be beneficial to the holders of industrial shares and debentures. As the yield on gilt-edged declined there would be a transfer of funds to those equities which were considered almost as safe compared to their yield, and the result would be an increase in their prices. Naturally the speculators in these securities were deeply interested in the fluctuations in gilt-edged prices. Secondly, speculators who needed funds for holding stocks found that the least troublesome way of taking advances and call loans on a low interest basis was against gilt-edged securities and first-class shares. As noticed earlier, the Imperial Bank offered particularly favourable terms on these lines after July, 1935. A decline in the prices of

¹ Muranjan, *Modern Banking in India*, Chapter IX.

² Lokanathan, *Industrial Organisation in India*.

³ Kaldor, N., *Speculation and Economic Stability*, *Review of Economic Studies* Volume VII., No. 1., October, 1939.

⁴ Keynes, *General Theory*, page 159.

gilt-edged, or anything which shattered the confidence in them, was therefore likely to alarm the banks and make them less liberal than otherwise.

Policy of Restraint Justified

Thus we see that the Reserve Bank had more than one reason not to lower the yield on gilt-edged securities and stimulate a rise in their prices any further. Firstly, the policy might have defeated itself by causing an outflow of funds from the country, reducing the sterling assets held by the Bank, and necessitating drastic contractions in its liabilities. Secondly, even if this danger did not exist, the reduction of the yield on gilt-edged would have been to no purpose except for the slight economy to the Government by way of interest payments. The technique of initiating "cheap money" through gilt-edged was founded on the assumption that the lowering of the yield on it would be transmitted to the others in the "complex" of interest rates, and ultimately induce greater outlays on investment. But, in India, not only were the means for extending the benefit of lower interest-rates beyond the pale of gilt-edged themselves very limited, but, due to the immaturity of the capital market, too great a reduction of the yield on gilt-edged might have merely stimulated speculation and penalised the genuine investors. The net result was that even though the Reserve Bank could have lowered the yield on gilt-edged securities as much as in systems which pursued an active cheap money policy directed to that end, it was not in a position to do so as it would have created more problems than it solved.

IX

THE TECHNIQUE OF DEFICIT FINANCING, 1939—45

DEFICIT financing, as a technique of monetary management, is in the direct line of evolution from the more orthodox methods of central banking. "During the twenties", says a recent writer tracing this evolution in detail, "the emphasis was on central bank policy. The central bank, by its control of reserves, could control the quantity of money, which controlled the interest-rate, which controlled investment, which controlled the business cycle. There was a shift of emphasis from the short-term rate to the long-term rate. There was a growing interest in the 'natural rate', which equates saving and investment. There was a shift of emphasis from the rediscount rate to open-market operations. There was the controversy over federal reserve policy with relation to the stock market boom". When the depression came in the 'thirties, the emphasis continued to be on central bank policy and the interest rate, with much insistence that open-market operations were not large enough, not begun soon enough, or not continued long enough, but, he continues, "as the excess reserves continued to pile up and attain huge dimensions, and interest-rates sank to levels never previously reached, it was generally recognised that, whatever may have been the defects of central bank policy, the main trouble lay in the inadequacy of the interest rate itself.....The financing of deficits represents a further step toward making an easy money policy effective....."¹

It would be, however, only correct to recognise that the premises of deficit-financing, conceived in this sense, differ from those compelling circumstances of war which leave no other alternative to the authorities concerned but to incur deficits. Fundamentally, the objectives are themselves in divergence. In the former, the purpose is to induce private investment and private consumption in the widest possible measure; in the latter, on the other hand, the over-riding aim is "to restrict private consumption and to encourage only such investment as increases the production of materials necessary for war. This divergence involves, in turn, certain important differences in technique.

¹J. H. Williams, Deficit Spending, *American Economic Review*, Vol. XXX No. 5, February, 1941.

Nevertheless the content of deficit financing is the same in the sense that it means the supplementation of the community's savings with created money by the central bank, in aid of an agency which has decided to spend beyond its own resources. It has thus the potentialities for overcoming the limitations of monetary management in inducing investment. No doubt, when undertaken on a sufficiently large scale by the State as in war-time, it also divests the monetary authority of such policy-making powers as it possesses and reduces it to a mere routine. Under these conditions, even where the "independence" of central banks *de jure* is an article of faith, deficit financing tends to make the institutions *de facto* departments of their respective governmental machineries. But the divorce of influence and power from responsibility is not an essential and inevitable feature of deficit financing, especially if the agency chosen for being financed is not the State. Even when the beneficiary is the State, the extent of the central bank's influence depends on the general nature of the project in question, the personnel of the bank, the traditions governing the relations between the Government and the bank, and such other factors.

It is natural that deficit financing, as a technique, should have a special appeal to a backward economy whose prospects of developing itself through the traditional processes of laissez-faire capitalism are exceedingly small. Since the problem usually confronted in such an economy is not one of temporary stagnation which can be overcome by the stimulating effect of small doses of deficit spending but one of chronic deficiency of capital, the kind of deficit financing required is also likely to approximate less to the cases where there is only an extension of "pump-priming" and more to those where the deficits are a by-product of war. The difference is that while in the one case the purpose of the restriction of private consumption is to accelerate the production of capital goods, in the other it is to divert production to the needs of war.

Several important lessons can therefore be drawn from the experiences of war-time in India. In this chapter we shall examine the methods employed to meet the deficits of war finance in India, purely on their merits as techniques.

Problems of Deficit Finance

The popular formula regarding war finance is summarised in the statement that the increased outlay of the Government must be met from either taxes or loans (their relative shares to be determined by the current ideas about income distribution and the practicability of enforcing them), and that only if these two together are insufficient to fill the deficit should the third alternative of

"inflationary financing" be even considered. Out of this formula has been derived the much-abused concept of the "inflationary gap."

This approach conceals the really important problems of deficit financing and, by placing undue emphasis on the quantitative money value of the deficit to be covered, focuses attention on the wrong indices. The fundamental problem of a war economy is to divert the required goods and services for military purposes either by reducing the current level of consumption or by producing more. It may well be that the deficit, in real terms, can be met by increased output, and that the consumption expenditure from the incomes created by the expanded outlay is capable of inducing still further increases in output. In this case neither the money value of the deficit nor the sources of finance possess within them the potentialities of inflation. But, on the other hand, once production has reached its maximum any further diversion for military purposes can take place only at the expense of reduced consumption on the part of the public; it is then necessary, if an inflationary movement is to be avoided, to restrict public expenditure to the full money value of the further deficits and to do so before the incomes so created are spent away. A truly inflationary situation begins to appear when the money expenditures on Government and private account tend to outpace the flow of available goods and services, to the extent that the discrepancy has to be met by a rise in their prices.

It follows that it is not the financing of the deficits, as such, that constitutes the problem, but the effect the methods employed have on the size of the national income and on its distribution between the military and civilian sectors. The balancing of the Government budget without the assistance of the central bank does not by itself prove anything. If we start from an initial position of monetary stringency and of considerable slack to be taken up in the economy, a loan from the central bank which increases the reserves of commercial banks and their power to create more liabilities may be the most efficient way of getting production on the move. But once full employment of all factors is achieved the cessation of further loans from the central bank does not guarantee non-inflationary finance. The subscriptions to the Government loans may come from the commercial banks who are likely to get back the amounts subscribed by them in the form of fresh deposits, and thus leave untouched the level of private consumption and private investment except in so far as the drain on their cash reserves restrains the banks' loans and advances. The cessation of loans from all banking institutions at the approach of full employment does not also restrict private expenditures, as the public can purchase the new securities, and even make fresh investments on their own, out of previously accumulated bank

deposits. To be strictly non-inflationary at this stage the loans to the Government must come from the public, excluding banking institutions, out of *current* income. This is why the inflationary potential after the attainment of full employment depends to a great extent on the methods of finance employed earlier.

One more point about deficit financing, of special significance for our analysis, remains to be mentioned. It would be a mistake to believe that only an excess of Government expenditure over Government revenue creates a deficit. A surplus in a country's commodity exports over its commodity imports tends to create a similar deficit, with the difference that it is the foreign importer who then expends the amount. In international trade the liquidity preference that has to be overcome before the public of one country agrees to take the liabilities of another country and hold them till they are honoured is far greater than if it were domestic securities. The exporters are therefore likely to pass on the foreign exchange to the central bank, if they are acceptable to it, against ready cash. The effect here is no different from that of a central bank loan to the Government, and can be met only by measures similar to those devised to meet the latter.

Items of Deficit in India

The items of deficit in India during the war can be broadly divided into (a) the excess of expenditure over revenue of the Government of India, and (b) the excess of expenditure over revenue of foreign countries in India. The former consisted of the deficit on 'revenue' account, and the defence expenditure on, what was called, 'capital account'. The defence expenditure on capital account was not included in the regular defence estimates on the ground that there were durable assets like airfields, telecommunications, etc., against this expenditure. The excess of expenditure over revenue of foreign countries in India can be similarly sub-divided into two. Firstly, at the outbreak of war the Government of India entered into an agreement with the British Government on how the financial responsibility for the defence of India was to be divided between the two countries. The principle on which it was based was that India should pay for its own local defence but that Britain would pay for all expenses incurred by the Government of India in the interests of the wider Imperial strategy. It was arranged that all the liabilities of the British Government incurred in this way should be settled by monthly payments in sterling to the account of the Government of India at the Bank of England. Besides this, the British Government, through its Ministries of Supply and Food, wanted to make purchases in India of jute, cotton, mica, hides, shellac, tea, etc. Some of them were to be made through the agency of the Government of India, in which case the latter was paid as for the defence

expenditures. The expenses of the Government of India on these counts constituted sub-item one, called Recoverable War Expenditure. But the British Government also made considerable purchases directly from private agencies and paid them in sterling. Sub-item two is thus reflected, in so far as they were tendered by the private agencies, in the purchases of sterling by the Reserve Bank from the market.

The total increase in money expenditures over money revenues from 1939-40 to 1945-46, under the different items, is tabulated in Table 15 in the following page.

Our discussion of the technique of deficit financing in this period can be divided roughly into four parts covering (a) September, 1939 to March, 1940 (b) April, 1940 to March, 1942 (c) April, 1942 to July, 1943, and (d) August, 1943 to August 1945. The basis of this division will become clear as we proceed. It is enough to mention here that each of these stages in the process possesses certain distinctive characteristics of its own, some of them being more significant from the point of view of monetary techniques with which we are directly concerned, and others less so.

First Half-Year

(i) September, 1939 to March, 1940 : The outbreak of war was followed in India by a minor boom, mainly as the result of premature over-optimism about the improvement in trade and industrial prospects. There was a sharp rise in commodity, bullion and industrial share prices, while both production and export indices began to improve rapidly. This caused a steady expansion in the demand for money which reached its peak in March, 1940. The advances (including bills discounted) of the Imperial Bank rose from about Rs. 30 crores in September, 1939 to Rs. 50 crores in March, 1940, while those of the other scheduled banks went up in the same period by over Rs. 25 crores.

The Reserve Bank responded, in the first instance, by buying sterling to the value of about Rs. 86 crores from the market, this having been made possible by the improvement in export trade. The Bank also bought Treasury Bills and short-dated rupee

TABLE 15
DEFICIT SPENDING, 1939—46

	(APPROXIMATE FIGURES)							(Rs. crores)	
	1939—40	1940—41	1941—42	1942—43	1943—44	1944—45	1945—46 (Revised Estimates)	Total	
Central Government, on Revenue Account	—	7	13	112	190	161	145	627	
Central Government, Defence Expenditure on Capital Account	—	—	—	53	37	63	15	168	
Recoverable War Expenditure	4	53	194	325	378	411	347	1,712	
Sterling Purchases by the Reserve Bank	86 ¹	76	99	127 ²	145	142	138	813 ²	
TOTAL	90	136	306	617	750 ²	777	645	3,320	

¹From September, 1939.

²Some of the sterling purchased by the Bank, it would appear, was sold to the Government of India for its expenditures abroad. Since these are already included under Central Government expenditures on Revenue and Capital Account, there is some double-counting involved here. The actual figures are not available, but the difference the double-counting makes to the estimate of total deficit spending is not likely to be very serious.

securities from the market for about Rs. 10 crores. The net result of these operations can be seen from the following table.

TABLE 16

						(Rs. crores)
		Govt. Bal- ances in the Bank- ing Dept.	Scheduled Bank Bal- ances in the Banking Dept.	Notes in Circula- tion	Rupee Coins in the Issue Dept.	Currency and Credit Expan- sion
Sept. 1939	...	17.8	20.4	196.1	75.7	..
Dec. 1939	...	10.6	12.1	230.0	66.4	+27.7
Mar. 1940	...	14.5	11.9	241.2	56.7	+52.3

This expansion of Rs. 52.3 crores however failed to meet the requirements of the scheduled banks, who found that they could satisfy the demand for advances, and at the same time maintain reasonable cash reserves, only by reducing their investments. This seems to have been done by getting some of their holdings discounted by the Reserve Bank and by refusing to take more Treasury Bills.

TABLE 17

					(Rs. crores)
		Total Demand and Time Liabs	Cash in hand and Balances with the Re- serve Bank	Advances and Bills Discoun- ted in India	Invest- ments
Sept. 1939	...	243.4	26.8	113.3	103.3
Dec. 1939	...	248.3	23.2	137.9	87.2
Mar. 1940	...	255.3	22.8	160.2	72.3

In December the Imperial Bank raised its Advance Rate to 3½ per cent, followed in February by the rise of the call money rates to 2 per cent.

The persistence in the sale of Treasury Bills to the public, even though on a slightly reduced scale, resulted under these conditions in the aggravation of stringency and in the rise in the yield of Treasury Bills during this period to an average of 2.2 per cent. There was no attempt to finance the needs of the Government by the purchase of *ad hoc* Treasury Bills by the Bank or through direct loans and advances from the Banking Department. Since the purchase of sterling from the market was its statutory obligation, and since even its other open-market purchases, referred to above, were undertaken mainly before January, it would appear that, at the peak of the stringency, the Reserve Bank was not particularly anxious to expand the supply of money any more than it could help.

Restriction vs. Speculation

The aim of this policy was apparently to restrain the speculative boom. In February, the Governor of the Reserve Bank made a statement which is interesting not only in what it had to say on this point but also as a reflection of the views of the management on the wider problems of cheap money and deficit financing. "To many monetary control means cheap money," he observed, "and it is often argued both in this country and elsewhere that the better the control the cheaper it should make money. This of course is essentially fallacious. The business of the controlling authority, as I see it, is to do as far as possible what freely operating markets would have done for themselves if they were not being subjected to abnormal stresses beyond their control or their ability to foresee..... On the other hand, if one goes further and tries to use such machinery to carry out theoretical policies and do what the market if left to itself in normal circumstances would not do one is liable to find oneself in a mess. *Nothing that has happened in the last twenty years has to my mind invalidated the old doctrine that capital comes from saving*, so that the whole question resolves itself into balancing three factors, first the desire to spend, second to invest in speculative securities and third to invest in securities bearing a fixed rate of interest..... Too great a reduction in the effective rate of interest must lead to drying up the investing habit in which case the only alternative is inflation, because Government must be efficiently carried on, particularly in war-time, and must get its money somewhere..... (The controlling authority) has to keep money on an even keel so as to encourage investment and to see that speculation, though a necessary element in the market does not go too far... After all, no high degree of technique is required if the whole of monetary theory simply boils down to turning on the printing press."¹

If the intention of the Bank was to restrain speculation, measures designed solely to tighten the supply of money were obviously inadequate. The upward movement of prices was drawing its impetus from powerful extra-monetary forces on whom the effect of a rise in interest rates could be but negligible. Moreover there was no certainty that the ordinary banks would co-operate in restricting their advances as long as their customers offered fairly good security and were willing to pay high interest rates for accommodation. As noticed earlier, the banks could, if necessary, reduce their investments and expand their advances. Substantial sales of gilt-edged securities effected in this manner would have the result of bringing down their prices, leaving the Reserve Bank in the dilemma of either allowing gilt-edged prices to fall, or supporting them and thereby indirectly replenishing the reserves of the banks.

¹Speech at the Fifth Annual General Meeting of the Shareholders of the Reserve Bank on 5th February, 1940, appended to the Report of the Meeting published by the Bank (my italics).

Above all, with the increasing exports to Britain against payment in sterling, there was a weakness in the armour of the Bank itself as it was under obligation to purchase sterling at the statutory rate. Every time the Bank bought sterling from the market or from the Government, it was increasing the supply of money.

The decision to make available goods and services for Britain against payment in sterling, and to continue maintaining the rupee-sterling rate at 1s. 6d., was made for reasons, and at levels, over which the Reserve Bank had no control. Neither was the Bank in a position to determine how much the Government's own deficit expenditure should be. As far as the Bank was concerned, these constituted its set of given data which not only could not themselves be altered by its policy but to which the policy had to be attuned. Under these conditions there was no question of the Bank "balancing" the desire to spend and the desire to invest in speculative and fixed-interest bearing securities, with the aid of the rate of interest or of the supply of money. The attempt to think in these terms betrayed the confused and misleading approach of the authorities to the problems arising from deficit finance.

If the pace set by the deficit expenditures and the attendant psychological frames of mind were giving rise to complications inconsistent with the healthy continuation of such expenditures, the only effective way of dealing with them was to devise selective measures of control. Such measures were not adopted, but it is significant that it was the intervention of developments like the publication of the Excess Profits Tax Bill and the rumours of price control that finally arrested the speculative boom in April, 1940. Once the prices in the stock and commodity markets took a sharp turn downwards it did not become necessary to think of selective control for another two years.

Inauguration of the Savings Movement

(ii) *The intervening period—April, 1940 to March, 1942—is outstanding as a period of steadily increasing but moderate deficits. The total of these deficits amounted to Rs. 442 crores, of which only Rs. 20 crores fell to the account of the Central Government. The rest were in the form of expenditures undertaken by the Central Government on behalf of the British Government, or of sales directly made by private agencies of export, for which payment was received in sterling. To trace the methods employed to finance these deficits we have therefore to take note of two main factors: first, the direct and straightforward borrowing programme of the Central Government, and second, the utilisation of the sterling received in payment for goods and services sold to Britain.

The Government made a start on its war loans in June, 1940 when the Indian Defence Savings Movement was launched. Subscriptions were invited in the first instance for three kinds of loans : Three Year Interest-Free Bonds, Three per cent Six Year Defence Bonds, and Ten Year Defence Savings Certificates. The response being extremely feeble, a second series of the 3 per cent Defence Bonds were issued from August, 1940. Including the subscriptions accepted in conversion of the 5 per cent 1940—43 loan, these Bonds yielded Rs. 44·4 crores by January, 1941, when their sale was discontinued. In February, 1941, a second 3 per cent Defence Loan 1949—52 was announced and kept open till February, 1942. Including the amount tendered for conversion in the form of 3 per cent Loan 1941, the receipts for this loan totalled Rs. 59·1 crores. Comparatively speaking, all the other Defence Loans in this period were failures. The total receipts as a result of the long-term borrowings of the Government up to March, 1942 were as follows :—

TABLE 18

		(Rs. crores)		
		1940-41	1941-42	Total
Three per cent Six Year Defence Bonds :				
(a) First Series	... ..	0·7	..	0·7
(b) Second Series (First Defence Loan)	... ..	44·4	..	44·4
Three per cent Second Defence Loan,				
1949—52	... ..	3·5	55·6	59·1
Three Year Interest Free Bonds	... ..	2·3	0·3	2·6
Ten Year Defence Saving Certificates	... ..	2·4	2·8	5·2
Post Office Defence Savings Bank	... ..	..	0·1	0·1
Post Office Cash Certificates and Savings Bank Certificates	... ..	28·9	16·0	44·9
		<hr/> 24·4	<hr/> 42·8	<hr/> 67·2

There was thus a surplus of Rs. 50 crores over and above what was necessary to meet the deficit on the revenue and expenditure account of the Government.

As for the sterling accumulations, they were used for different purposes : (a) for sales to the public, (b) for meeting sterling commitments on the account of the Government, (c) for repatriation of India's sterling debts, and (d) for increasing the holdings of the Reserve Bank. Sterling sold to the public in the two years under review was negligible, being no more than Rs. 2 crores. The sterling commitments of the Government, which amounted to Rs. 80 crores, were however included in its Expenditures, and the

methods employed to finance these commitments are therefore covered by the discussion in the preceding paragraph. But the repatriation of the sterling debts falls into a different category, because it represents essentially a shift in the loans of the Government from a sterling to a rupee basis, and, for which reason, to the extent that the rupee loans created in the place of the sterling loans repaid were absorbed by the investing public, there was a net reduction in the deficits originally incurred by the accumulation of sterling. The mysteries of these repatriations have therefore to be uncovered to discover how much of the deficits were in fact cancelled in the course of the operations connected with them. Lastly, the sterling held by the Issue and Banking Departments is the simplest to interpret, being direct evidence of the deficits met by borrowing from the Reserve Bank. The temptation, in fact, is usually to discuss Bank-financed deficits as if they consisted only of these sterling securities held by the Reserve Bank.

Repatriation of the Sterling Debts

* The repatriation of the sterling debts are complicated by the fact that there were at least three major schemes to put them through, and the methods used in each differed from the others in detail. First, from September, 1939 onwards, the Reserve Bank was authorised by the Government of India to buy Indian sterling securities in the open market in London and transfer them to it for extinction, in return for payment in rupee counterparts of those securities. That is, for every 3 per cent sterling paper bought by the Bank and cancelled by the Government, the Bank was paid in a 3 per cent rupee security of the same value and payable on the same date. The Bank was expected to pass on the rupee securities, thus created, to the investing public. The open market purchases under this scheme yielded sterling securities to the value of £17·1 million, £11·2 million and £12·1 million in 1939—40, 1940—41 and 1941—42 respectively; against them, rupee securities to the value of Rs. 22·8 crores, Rs. 14·8 crores and Rs. 16·1 crores respectively were issued.¹

Meanwhile it had been demonstrated well enough that the effect of open market purchases was to drive up the prices of the securities concerned and make the repatriations more expensive than was either necessary or reasonable. A new scheme was therefore announced in February, 1941, by which, with the aid of the special powers vested in the British Government in war time, the holders of the six remaining terminable sterling loans were required to surrender them for repayment at the prevailing market prices. Those who were resident in India were also covered by

¹The figures include open market purchases of terminable as well as non-terminable securities.

the scheme, being offered the choice to receive payment in the form of the rupee counterparts of the loans tendered. Sterling securities to the value of £60·1 million and £13·1 million were cancelled in this way in 1940—41 and 1941—42 respectively ; the rupee counterparts created in their place were of the value of Rs. 80·1 crores and Rs. 17·4 crores respectively.

As for the financing of the amounts so repatriated, the section of the loans repaid in India presented no problem, most of the holders having accepted payment in rupee counterparts. But, for the rest, the necessary sterling had been paid by the Reserve Bank out of its holdings in the Issue and Banking Departments, and the Bank had to be paid an equivalent amount in rupees. The Government decided against borrowing immediately from the market, significantly enough on the ground, that to do so would be "inconsistent with the policy which we are following with the Reserve Bank of maintaining money at as cheap a level as is possible without inflation".¹ It was therefore agreed, as a temporary measure, that the Bank would receive part of the rupee counterparts of the repatriated loans as payment, and that the Government would pay for the rest from its own balances with the Bank, through ways and means advances from it, and by the issue of *ad hoc* Treasury Bills to the Issue Department. To facilitate the replacement of sterling securities in the Issue Department by the new rupee securities, the old statutory restriction on the amount of Government securities that the Department could hold was lifted. The immediate result of this arrangement was to divide the rupee counterparts of the six terminable loans roughly equally between the Government and the Bank, the long-term plan being that each should pass on its holdings to the public.

But more complications were still to come. In June, 1941, the Government announced the conversion of two types of rupee loans created as a result of the repatriation, into "existing loans for which there is a fairly sustained demand from the market." Loans to the total value of Rs. 33 crores were thus converted. Concurrently with this operation, the Government cancelled some other rupee loans, similarly created by the repatriation, on the ground that they were in excess of the absorptive capacity of the market over the next few years. The financing of these cancellations, in so far as the securities had to be purchased from the Reserve Bank to be cancelled, was done through a further issue of *ad hoc* Treasury Bills.

The ways and means advances taken by the Government from the Bank for the second repatriation scheme were repaid by October, 1941, and the *ad hoc* Treasury Bills issued for the same

¹Budget Speech of the Finance Member, February, 1941.

purpose (including for the cancellations in June) cancelled by December of the same year. In the following Budget Speech, the Finance Member claimed that out of Rs. 139 crores of rupee counterparts created since repatriation started upto December, 1941, Rs. 47½ crores had been cancelled, Rs. 51 crores were in the hands of the public, a little over Rs. 31 crores were held by the Reserve Bank and about Rs. 10 crores held on Government account.¹

The stage was thus set for the third scheme, announced in December, 1941, which covered the non-terminable securities in the same manner as the second scheme covered the terminable securities. All holders of 3½ per cent Stock 1931 were given notice that the £77 million due on them would be repaid in January, 1943, while the holders of 2½ per cent Stock 1926 and 3 per cent Stock 1948 (amounting to £11 million and £70 million respectively) were required to surrender them by February, 1942. The face value of the non-terminable loans repaid through this scheme before April, 1942 was £73·9 million. No rupee counterparts were created against them. The payments were made in cash even to those who surrendered the sterling securities, as all rupee securities were at the moment very unattractive to investors, and the Government paid the Reserve Bank by a large-scale issue of *ad hoc* Treasury Bills.

Sources of Finance, 1939—42

The above account of the various schemes of repatriation helps us to make an estimate of the methods employed to meet the deficit of Rs. 522 crores incurred between September, 1939 and March, 1942. Taking the amount borrowed from the market, we have, first, the loans floated directly by the Government, totalling Rs. 67·2 crores. To this has to be added the rupee counterparts of the repatriated sterling loans held by the public. Accepting the figure given by the Finance Member for December, 1941, and making a liberal provision of about Rs. 20 crores to cover the further absorption from December, 1941 to March, 1942, we get a total of Rs. 71 crores. The value of the deficits financed through borrowing from the market may therefore be placed at about Rs. 138 crores *i.e.*, roughly a fourth.

It is interesting to consider how much of this was contributed by banking institutions other than the Reserve Bank. The following table illustrates the position of the scheduled banks during the period :—

¹Budget Speech, February, 1942.

TABLE 19'

(Average of Friday figures)	Total Demand and Time Liabs.	Cash in hand and Balances with Reserve Bank	Advances and Bills Discounted in India	(Rs. crores) Investments
September, 1939 ...	243.4	26.8	113.3	103.3
March, 1940 ...	255.3	22.8	160.2	72.3
September, 1940 ...	265.1	51.5	116.0	97.5
March, 1941 ...	284.6	47.1	126.2	111.3
September, 1941 ...	323.4	56.1	119.1	148.4
March, 1942 ...	322.2	50.1	117.3	154.8

Since the increase in Treasury Bills issued to the public was negligible it must be assumed that most of the new investments of the banks were medium- and long-term rupee securities. Over two-fifths of the amount borrowed from the market, through the loans floated by the Government of India as well as by the absorption of the rupee counterparts of the sterling securities, were therefore contributed by the scheduled banks. Hence genuine borrowing from the public were but a sixth of the total deficit.

The rest *i.e.*, Rs. 384 crores, was covered by various forms of borrowing from the Reserve Bank, some being less obvious than others. The most straightforward of these were against the sterling securities and rupee counterparts accepted and retained by the Bank as assets. But others, no less important, are easily overlooked. Firstly, there were the short-term loans outstanding on Government account at the Reserve Bank as ways and means advances and *ad hoc* Treasury Bills. Secondly, from July, 1940, the Government began to issue rupee notes to the Reserve Bank which were henceforth to be treated as equivalent to 'rupee coin'; with the difference that they could be passed into circulation and carried no interest, these rupee notes were the same as the Government's *ad hoc* Treasury Bills. Thirdly, in more concealed form, were the rupee counterparts cancelled by the Government with the help of loans from the Reserve Bank as part of the second repatriation scheme. The fact that these loans were repaid in the course of the next few months suggests at first that they belong to a different category. But, on closer reflection, it will be noticed that the repayment was possible only because every instalment of further British expenditures through the agency of the Government increased the Government's credits with the Reserve Bank. In other words, the cancellations were not achieved through borrowing from the market but through short-term credits from the Bank.

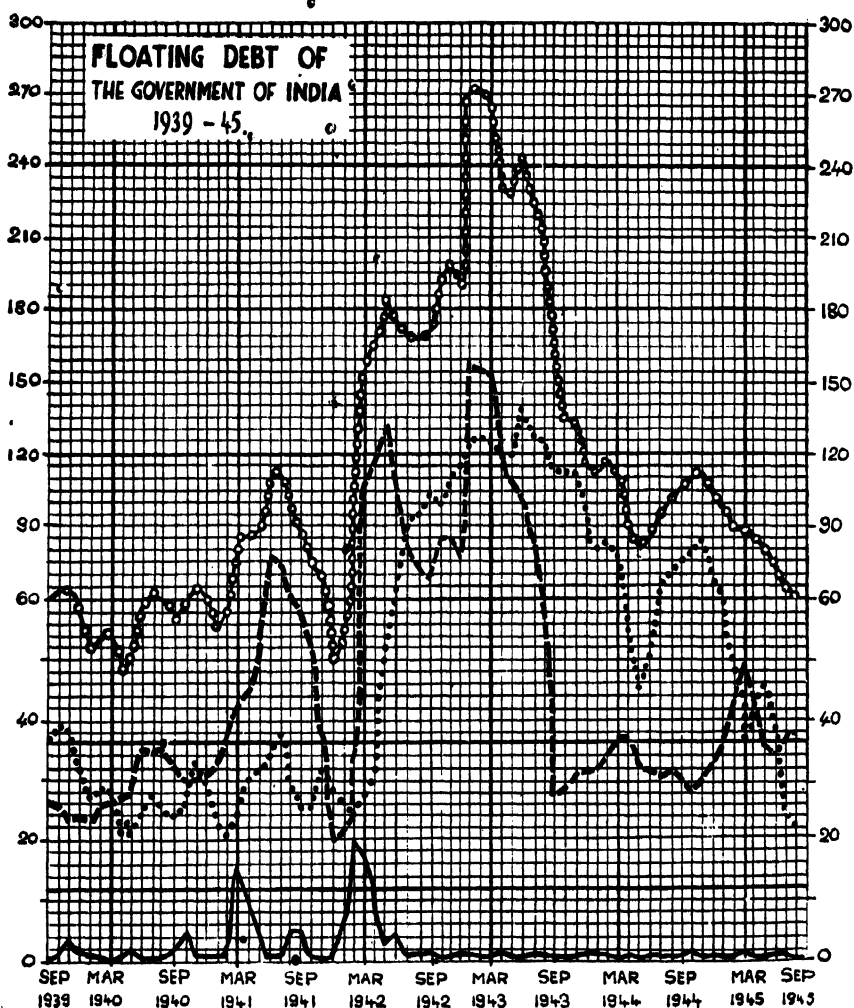
The reliance placed on the creation of credit to finance the deficits in these early years of the war was, on the whole, well conceived. The impact of the increased expenditures on the economy was a healthy one, succeeding as they did in pulling it out of the morass into which it had been thrown by the depression of the 'thirties. But it will be noted that this technique of deficit financing was in direct contradiction to the tenets laid down by the Governor of the Reserve Bank in February, 1940. Nothing could have been a greater negation of his basic proposition that capital came from saving than that only a sixth of the deficits was met by genuine borrowing from the public. The only explanation that can be advanced for this interesting anomaly is that the authorities accepted these "theoretical policies" through the force of circumstances rather than because they appreciated their implications. It is supported by the fact that despite the gradual appearance of bottlenecks in production and rising prices, especially towards the later stages of the period, and even though there was no prospect of an early end of the war, the question of introducing rationing and price controls was not raised.

Technical Defects in Loan Operations

While generally approving the resort to credit creation for financing the deficits, it should however be pointed out that as long as there were funds in the market not required for increasing the production, and available to be tapped without causing stringency, these should have been absorbed as an alternative to the creation of more credit. From this point of view, the following technical details may be pointed out in criticism.

Firstly, the flotation of the Government's rupee loans was imperfectly managed, particularly in regard to the system of creating rupee counterparts against the repatriated sterling loans. To mobilise resources to the maximum from current incomes, two conditions should have been attended to: (a) many loans kept open to investors at all times with varying conditions attached to them so as to appeal to different classes, and (b) reasonable amount of assurance given to investors that if they waited a little longer they would not get more favourable terms. Neither of these were satisfactorily complied with. Barring the Ten Year Defence Saving Certificates, Post Office Defence Savings Bank, and Three Year Interest Free Bonds, none of which was a great success, there was only one loan open at a time to the public. Further, the issue of the rupee counterparts of the sterling loans at various stages was a deterrent to investment in other loans. Since the terms on them had been devised to meet different conditions at different times, some of these rupee counterparts offered handsome yields compared to what was available on Government securities. The correct policy under the circumstances would have been to include

- TOTAL FLOATING DEBT
- TREASURY BILLS HELD BY THE PUBLIC I.E. TENDER BILLS.
- TREASURY BILLS OUTSTANDING WITH THE RESERVE BANK I.E. 'TAP' BILLS.
- LOANS FROM THE RESERVE BANK



the loans necessitated by the repatriations within the pattern of the general Defence borrowings, and float a number of loans together, in the wolf-pack model, so that each had a particular function to perform without coming in the way of the others.

Secondly, something must be said about the floating debt of the Government. In Chart 6 is shown the fluctuations in the amounts outstanding of its various constituents from 1939 to 1945. It will be clear from this that the volume of Treasury Bills held by the public in March, 1942 was no higher than at the outbreak of war. This stands in contrast to the fact that the average yield on them fell from 1.63 per cent and 1.87 per cent per annum in 1938—39 and 1939—40 respectively to 0.89 per cent and 0.72 per cent per annum in 1940—41 and 1941—42 respectively. There was apparently no desire to exploit the easy money conditions prevailing to increase the off-take from the market.

Lastly, more could have been borrowed from the ordinary banking institutions on the basis of the cash reserves they possessed. As it happened, the reserve ratio of the scheduled banks increased from 8.9 per cent in March, 1940 to 17.2 per cent in September, 1941 and to 15.5 per cent in March, 1942. It appears to have been the view of the Reserve Bank that the rising ratio was a sign of the strength of the banks, and that their greater "liquidity" was not to be discouraged.¹ This is rather unconvincing since it may be asked what was the necessity for the banks to maintain cash reserves above a certain level—say, 10 per cent of their liabilities—when any excess was invested in gilt-edged securities and when the Reserve Bank was always prepared to rediscount such securities. It would be wrong to advocate a policy of providing banks with reserves for the specific purpose of driving them into gilt-edged (as was done in Britain during the First World War and again after 1931), since there was no virtue in relying on banks to finance the deficits when the restriction of consumption was the main objective. But having provided the banks indirectly with more reserves, it would have been proper to encourage them to invest in gilt-edged rather than borrow, as an alternative course, from the Reserve Bank and thus increase the reserves of the banks still further. In Britain, during the late war, a special Treasury Deposit Receipt system was in fact introduced as a direct link for short-term funds between the Treasury and the commercial banks; by providing facilities for the prior encashment of these Receipts, the banks were also enabled to tap directly from the Treasury's Balances at the Bank of England when in need, and the phenomenon

¹ ".....Very wisely, however, banks realised that in war time such runs must be regarded as in the order of things, and they have therefore.....kept a very liquid position." Speech by the Governor of the Bank at the Seventh Annual General Meeting of Shareholders, August, 1941.

of periodic spasms of stringency during the transfer of public loan subscriptions to the Exchequer checked.¹ This system could have been adopted in India with advantage.

The Inflationary Phase

(iii) The third period—April, 1942 to July, 1943—represents, what may be called, the inflationary phase of the war financing. The approximation to the full employment of all available goods and services and the growth of bottlenecks, of which there were some signs earlier, were confirmed in the latter half of this period. As the war approached the frontiers of India there was a great influx of Allied armies into the country, the defence expenditures rose to unprecedented levels, consumer goods became increasingly scarce, and prices began to soar higher and higher. With no effective machinery for rationing and price controls in the civilian sector (the supplies for the Government were bought at controlled prices) the burden of restricting consumption fell almost completely on financial methods. But the deficits to be covered were of such magnitude that no technique of finance, however perfect, could have been an adequate solution.

As statistics on some of the relevant items are available only for full financial years (*i.e.*, April to March), and not on monthly or quarterly basis, we shall have to be content in these cases with analysing the figures from April, 1942 to March, 1943, and leave the remaining three months for consideration in the following period.

The total deficits to be financed in 1942—43 amounted to Rs. 617 crores *i.e.*, nearly Rs. 100 crores more than in the three previous years put together. Over three-quarters of these were spent directly by the Central Government, as compared to less than half of the deficits between September, 1939 and March, 1942. The other quarter represents the sale of goods and services to foreign buyers by private agencies.

In answer to this, the most outstanding change of technique was, as will be noticed from Chart 6, with regard to the sale of Treasury Bills to the public by tender. From Rs. 28 crores in March, 1942, the Treasury Bills outstanding with the public rose to Rs. 125 crores in March, 1943. It was as if the authorities had suddenly realised that there was such a source of finance available to them. The expansion was achieved also without any substantial increase in the yield on the Bills.

¹ I have made use here of two Reports ("Not for Publication") prepared by W. T. C. King for the National Institute of Economic and Social Research (U.K.) on the effect of the war on the British Money Market and the Banking System.

The borrowing programme continued as before. From July 1942 the Third Defence Loan *i.e.*, a 3 per cent Loan, 1951-54, was opened to the public and left on tap till June, 1943. In October, 1942, a further issue of the existing 3 per cent Loan, 1963-65, was made for Rs. 15 crores, but of this Rs. 11.6 crores was contributed by the Reserve Bank. Between January and March of 1943, the non-terminable $3\frac{1}{2}$ per cent Sterling Stock was redeemed as announced in December, 1941. Rupee counterparts to the value of Rs. 67.6 crores were created against them and held initially on Government account, the financing of the transaction being derived mainly from the issue of *ad hoc* Treasury Bills to the Reserve Bank.¹ These counterparts were also available to the public. The total absorption of funds in all these ways between April, 1942 and March, 1943 was Rs. 89.1 crores. Thus, in conjunction with the increased sales of Treasury Bills, about a third of the deficits was financed by borrowing from the public.

But this does take into account the amount subscribed by banking institutions other than the Reserve Bank. The following figures summarise the balance sheets of the scheduled banks.

TABLE 20

		Total Liabilities	Cash and Balances with the Reserve Bank	Advances in India and Bills Discounted	(Rs. crores) Investments
March, 1942	...	322.2	50.1	117.3	154.8
March, 1943	...	493.6	66.5	129.2	297.9

Allowing for the increase of their investments by Rs. 143.1 crores, it is obvious that genuine borrowing from the public, representing reduced consumption on its part, amounted to only about Rs. 43 crores *i.e.*, roughly 7 per cent of the deficits. There is no guarantee that even this came from current incomes.

General Repercussions

The rise in prices, as was to be expected, was not uniform. The highest increases were registered in certain essential commodities of food and clothing, the other prices more or less reflecting the consequent increases in cost of living. The following table gives the Index Numbers of wholesale prices published by the office of the Economic Adviser to the Government of India. They do not, of course, show the conditions in the "black markets" which were flourishing all over the country.

¹Vide Chart 6

TABLE 21

Base 100: Aug. 1939

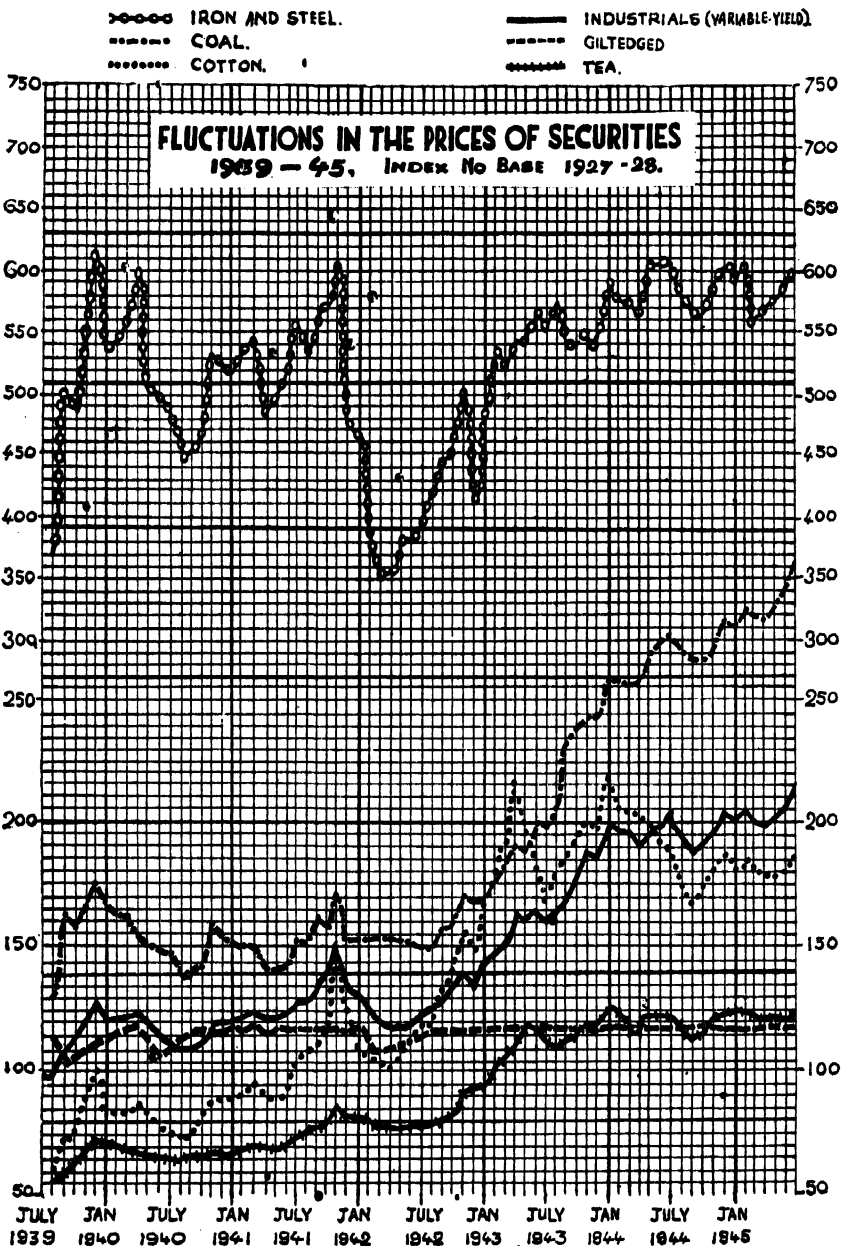
		Food and Tobacco	Raw Materials	Manu- factured Articles	Rice	Wheat	Cotton Manu- factures	General Index
April	1942	137	162	163	169	216	193	146
July	1942	156	162	173	207	224	242	160
October	1942	167	165	189	218	224	300	171
January	1943	191	172	224	218	252	415	190
April	1943	284	172	227	634	308	469	214
July	1943 ...	294	183	260	951	346	493	239

It is obvious that, under these conditions, the phenomenal expansion of currency that took place was incidental to the situation created by the volume of the deficits uncovered by borrowing from the public, and the lack of effective economic controls. The Governor of the Reserve Bank was right in pointing out at that time that "though there has been a considerable rise in prices in India, I do not consider that this is the result of the increase in currency, but rather that the two phenomena together are the unavoidable result of the large purchases of goods and services being made by the British Government in India for which they give us sterling which we exchange for rupees."¹ A considerable part of the increase in note circulation was accounted for by the larger amounts of cash held by banks, other institutions and private individuals, as a result of the general preference for liquidity, the greater actual requirements of cash in the existing conditions, and the absence of banking facilities in rural areas to which a good proportion of the new money must have percolated.² This needs to be emphasised here because there have been attempts to analyse the problems of deficit financing in this period purely in terms of the currency in circulation.

The effect of the Japanese War on the stock and share markets was two-fold. On the one hand, the approach of the war to India's frontiers produced a certain amount of soberness among those who operated in them. This reached such depths of pessimism at one stage that the Stock Exchanges and the Government had to step in and fix minimum prices. But, after April, 1942, prices began to recover and minimum prices were either lifted altogether or raised to higher levels. The upward movement was helped by the increasing volume of funds trying to find investment and by the prospects of huge profits in industries directly connected with the war effort. The nature of these movements will be clear from the accompanying Chart.

¹Speech at the Eighth Annual General Meeting of Shareholders, August, 1942.

²Speech by the Deputy Governor of the Reserve Bank at the Ninth Annual General Meeting of Shareholders, August, 1943.



But the same factors that were likely to infuse soberness into the share markets made the bullion markets in the country subject to the most violent disturbances. At the outbreak of war in 1939 the domestic markets in India were not interfered with but the movements of the precious metals into and out of the country were restricted by Special Ordinances. The result was to insulate internal prices from those prevailing in markets abroad.¹ But though there were restrictions on export, fair amounts of gold and silver were in fact sold to Britain in the following months, through licences issued by the Reserve Bank, as these metals were required in payment for Britain's purchases from the United States.² The internal prices were therefore subject, in addition to the psychological effects of the changing war situations and the internal demand for investment, also to the changes in the volume of this export demand. Nevertheless, after an initial spurt at the outbreak of war, internal prices for gold and silver remained remarkably steady till the end of 1941. But the approach of war to the borders of India and the rising level of prices made both metals the most convenient "hedgies" against inflation and all other uncertainties. From Rs. 52½ per tola in April, 1942 the price of gold rose to Rs. 96½ per tola in April, 1943, while silver rose from Rs. 87½ per 100 tolas in April, 1942 to Rs. 135 per 100 tolas in April, 1943.

The Beginning of Controls

The period April to July, 1943, which represented the climax of "the inflationary phase", also witnessed the first attempts at putting into effect a systematic body of direct, economic controls. It began with a warning from the Finance Member to speculators in general and to the cotton trade in particular. It was followed in May by the prohibition of all forward and option dealings in bullion. The same month an Ordinance enforcing compulsory savings on those paying Excess Profits Tax was promulgated, the amount paid to the Government on this Account being repayable after the war with an interest of 2 per cent. Simultaneously, an order seeking to control issues of capital came into force; the object of this was to prevent the flotation of companies which did not assist the production of essential war or consumption goods and to check the growth of mushroom companies. In close succession followed measures to control the production and distribution of cloth, to prevent hoarding and profiteering in general, and to discourage speculation. In June the Government of Bombay specifically asked the authorities of the Bombay Stock Exchange to take effective measures to prevent speculation in stocks and shares.

¹Dickson H. Leavens, *Bullion Prices and Gold-Silver Ratio, 1929—45*. The *Review of Economic Statistics*, Volume XXVIII, No. 3, August, 1946.

²Incidentally, Britain paid for these in sterling as for all its other purchases in India.

In July the Government assumed powers under the Defence regulations to prohibit bank advances against any commodity mentioned by them (including bullion) and to require the repayment of any such outstanding advance within a specified period. The Reserve Bank also took this opportunity to send a general circular to all the scheduled banks in which it said : " Banks are advised that it is not the intention of the Government of India to interfere with the finance of trade through loans and overdrafts granted by them to their regular customers for legitimate trade purposes. There is no objection to banks continuing to grant advances to mills or factories for the purpose of buying and holding stocks of raw materials, to wholesale and retail trades for the purpose of buying goods for re-sale, or to recognised bullion merchants against the security of gold and silver held by them in the normal course of their business as bullion merchants. Banks are, however, warned that any indication that advances are being taken from them for speculative purposes may compel Government to issue orders under Defence of India Rule 94 B prohibiting such loans in the public interest regardless of the interference with normal business that might result " .¹

(iv.) August 1943 to August 1945 : The change in policy, implied in the series of direct economic controls, instituted from April 1943, began to take effect in the fourth period with which we are dealing. In addition to their direct repercussions on prices and business conditions, they contributed indirectly to making the financial aspect of deficit spending more satisfactory.

Just as we left out some of the statistics relating to the period April to July, 1943, to be considered in this section, we shall be compelled to extend our analysis of this section in some cases to March 1946 due to the difficulty of separating the first half-year of 1945, April to September, from the second half in the statistical statements.

Improvement in Loan Finance

The total deficits to be covered between April, 1943 and March, 1946² were about Rs. 2,172 crores, the total for the first two financial years alone being Rs. 1,527 crores.³ The technique to meet these deficits remained substantially unchanged, but as will be noticed from the table below the long-term borrowings of the Government from the public were eminently more successful than in previous years.

¹Commerce, Volume LXVII, No. 1706, 31st July, 1943.

²Figures for 1945—46 are from the Revised Budget Estimates.

³In judging these figures, it is important to remember that while undoubtedly influenced by the general rise in prices most of the purchases made by the Government were at control prices.

TABLE 22¹

(Rs. crores)

	1943-44	1944-45	1945-46
3 per cent Six Year Defence Bonds—(a) First Series ...	..	..	..
(b) Second Series ...	20.0	..	..
Three Year Interest Free Bonds	..	..	—0.6
3 per cent Loan 1951-54 ...	14.8	..	..
Rupee Counterparts of Sterling Loans Repatriated (net Investments) ...	78.1	15.0	—5.7
3 per cent Loan 1963-65 ...	15.2	..	25.0
3 per cent Funding Loan 1966-68 ...	75.1	35.0	..
3 per cent Loan 1953-55 ...	110.9	3.8	..
Five Year Interest Free Prize Bonds ...	1.8	2.3	1.2
3 per cent Victory Loan 1957	..	114.1	..
3 per cent Second Victory Loan 1959-61 ...	..	6.2	107.5
2½ per cent Loan 1948-52 ...	..	50.0	25.0
2½ per cent Bonds 1950 ...	..	..	35.1
3 per cent First Development Loan 1970-75 ...	..	..	115.1
2½ per cent Loan 1960 ...	..	..	13.4
P. O. Cash Certificates ...	..	1.2	3.0
Defence Savings Certificates ...	1.4	—0.6	—0.5
National Savings Certificates ...	8.7	19.5	23.0
P. O. Savings Bank ...	12.0	16.0	33.7
P. O. Defence Savings Bank ...	3.6	4.6	1.7
	<u>341.5</u>	<u>266.9</u>	<u>376.6</u>

A glance at Chart 6 would show that the floating debt (including 'tap' and 'tender' bills) began to fall off from March, 1943 till it was no more than Rs. 60 crores in August, 1945 (and Rs. 83 crores in March, 1946). One of the main reasons for this was that, by the financial year 1943-44, most of the sterling repatriations had been completed, so that the subsequent receipts of sterling payments from the British Government augmented the Central Government's balances with the Reserve Bank without violent interruptions. The returns of the Banking and Issue Departments demonstrate the change very clearly.

¹Does include amounts taken over by the Government, but on the other hand, does not include deposits by payees of E.P.T.

TABLE 23

	ISSUE DEPARTMENT		BANKING DEPARTMENT	
	Sterling Securities	Rupee Securities	Balances held Abroad	Deposits of the Central Government
March 1942	207.4	133.8	41.1	20.0
March 1943	401.5	186.5	87.7	16.6
March 1944	777.0	58.3	157.1	59.8
March 1945	972.3	57.8	377.5	242.6
March 1946	1,123.3	57.8	597.2	512.9

Allowing for the reduction of the Treasury Bills held by the public from Rs. 125 crores in March, 1943 to Rs. 32 crores in March, 1946, the total amount borrowed by the Government from the public may be placed at Rs. 892 crores. Of this the scheduled banks contributed about Rs. 223 crores, the "genuine" borrowing being therefore Rs. 669 crores, which was nearly a third of the total deficit to be covered. The performance was incomparably better than that of any of the other periods we have reviewed.

Other Features, 1943—45

The comparative stability of prices achieved in these three years will be clear from the following table :

TABLE 24

		(Rs. crores)					
		Raw Materials	Manufd. Articles	Rice	Wheat	Cotton Manufs.	General Index
July 1943	...	183	260	951	346	493	239
July 1944	...	204	261	333	389	295	245
July 1945	...	212	243	335	359	277	244

The most active intervention of the Reserve Bank to keep prices down in this period was in the bullion market. From August, 1943 onwards the Bank undertook sales of gold on a considerable scale till August, 1945, whenever the prices tended to rise too high. The sales, which amounted to 7.5 million ounces, were made not at a fixed price but at the prevailing market prices. The dampening effect was therefore on account of the knowledge that the Bank would come into the market when prices rose above a certain level rather than due to the actual prices at which the sales were made. This, coupled with the fact that the gold was being sold on behalf of the British and American Governments (mainly British), on a basis of profit-sharing between these two Governments and that of South Africa (who supplied most of the gold)

gave rise to a certain amount of misgivings. In the depression period of the 'thirties, when purchases of gold internally would have been a useful operation both for the buyers and for the sellers without at the same time any loss of metal to the country, gold worth several hundred crores of rupees was instead exported abroad. These exports continued even into the early stages of the war. But, when internal bullion prices were going up, gold was being sold back to India and the profits appropriated by the foreign agencies. The criticism was therefore valid that, for all practical purposes, the open market operations in gold which were the proper function of an internal agency were in fact being delegated to foreign agencies. But the objections raised to the sliding scale of the sale prices were not so strong, for, the purpose of the Bank was as much to absorb the maximum amount of purchasing power as was possible and desirable for combating inflation as to keep the price of gold within limits. In this the Bank did succeed in striking a happy medium, as the range of the highest and lowest spot prices of gold in Bombay show very well.

TABLE 25

(Per fine tola to
the nearest rupee)

			Highest	Lowest
April	1943	...	91	71
July	"	...	82	70
October	"	...	85	78
January	1944	...	71	71
April	"	...	76	74
July	"	...	75	75
October	"	...	69	65
January	1945	...	75	70
April	"	...	75	73
July	"	...	79	78

An interesting development in this period was that the value of the Advances and Bills Discounted of the Scheduled Banks which had been going down since April, 1940, turned the corner in 1943 and began to rise steadily. From Rs. 147 crores in July, 1943 they increased to Rs. 361 crores in March, 1946. Correspondingly, the rate of accumulation of investments slowed down, and the cash-liabilities ratio fell from an average of 16.7 in 1942-43 to 13.6 in 1945-46. This changing structure of assets can be attributed to various causes, like the rise in prices, increased economic activity, etc. Nevertheless it was a significant proof of the ability of the Banks to determine their own policy. With the necessity for maintaining cheap money, for the sake of the Government's public debt operations if not for anything else, the old

relationship between the cash reserves of the banks and their liabilities was reversed. Now it was not the cash reserves that regulated the liabilities but the liabilities that regulated the cash reserves.

Another significant development, which was not altogether unrelated to the phenomenon mentioned above, was the steep rise in the prices of industrial shares after the war ended and when restrictions and profits were lifted one by one. The General Index of Variable Yield Industrial Securities (prepared in the Office of the Economic Adviser to the Government of India, with 1927-28 as the base year) rose from 199.8 in April 1945 to 249.7 in March, 1946. Individual scrips, like the popular Tata Steel Deferreds rallied from Rs. 2,030 in March, 1945 to Rs. 2,920 in March, 1946.

Conclusions

To conclude, of the total deficits of over Rs. 3,300 crores incurred in India between September, 1939 and March, 1946 not more than Rs. 800 crores were met by borrowing from the public. The rest were met by the creation of money. Of the amount so created, the amount subscribed by the ordinary banks was only about Rs. 420 crores. Thus nearly two-thirds of the deficits were financed by the direct expansion of the liabilities of the Reserve Bank.

The experience of these six years shows however that the ways and means of financing the deficits mattered only in so far as they affected the problem of finding the necessary physical resources on which to expend. It is conceivable that prior to a state of full employment of the factors of production, the methods of finance adopted might influence the rate of investment, but once all the resources were drawn into service the pattern of finance of the subsequent deficits reflected more the degree of success achieved in restricting expenditures elsewhere with the aid of direct controls.

The technique of deficit-financing in India between 1939 and 1945 was not one that was conceived in advance with due appreciation of the needs and consequences of such financing but a conglomeration of measures adopted at each step with respect to the immediate requirements. The policy of changing the tactics according to the circumstances was, in some sense, inherent in a situation created by a war whose future demands were an unknown magnitude, and particularly under the peculiar conditions obtaining in India. The uncertainties and peculiarities do not, however, seem to warrant the range of indeterminacy, which a review of the techniques over the period as a whole reveals. In the first few months, when the Government of India's own

budget was balanced without any new loans, there did not seem to be even an awareness of the fact that deficits were being created by the exports abroad against payment in sterling ; nor were there any settled convictions about how the deficits should be financed when they would arise. In the following two years the nature of the deficits was recognised but their consequences were not given much thought to till the deficits assumed gigantic proportions after the outbreak of the Japanese War. For a time the control of the economy seemed to have slipped out of the hands of the authorities. But the situation was soon retrieved, and the technique introduced and developed was fairly successful in stemming the tide.

In assigning the responsibility for the vacillation, we should be careful to remember the limitations to the scope of management by the Reserve Bank. The executive authorities in India were guided by motives and considerations on which any advice from the Reserve Bank, even if tendered, were not often likely to make much impression. In this sense, the co-ordination between the Government of India and the Reserve Bank was not comparable to that maintained between the British Government and the Bank of England or even that between the Government of the United States and the Federal Reserve System. But, here again, after due allowance for all this, it is not impossible to gain an impression of what the Reserve Bank itself thought from the various pronouncements of its executive heads. One cannot then fail to detect a distinct change for the better in the views of the management in the second half of the period in question.

No one will pronounce the experiment of deficit-finance in these six years of war an unqualified success, but neither can it be condemned altogether as a hopeless failure. The limitations inherent in the situation were tremendous, and yet the financing of deficits by the creation of money to the tune of Rs. 2,500 crores did not end in a collapse of the whole monetary structure. The recovery after 1943 despite the mounting deficits must be considered particularly remarkable. The fact that many of the difficulties encountered are capable of being overcome in a future repetition of the experiment therefore gives reason for hope.

CENTRAL BANKING AND MONETARY MANAGEMENT IN INDIA RECONSIDERED

Most of the literature on central banking treat it as a separate field in monetary economics. It is studied mainly with reference to those functions and operations which have come to be identified with central banks in the last quarter of a century, and independently of the broader principles which form the subject-matter of monetary theory. This approach has been rejected in this study because, while it may help to describe the institution of central banking as it is currently conceived, it does not aid its evaluation as a technique of management in relation to a given situation or to a particular economic system. The first thing is therefore to consider what the management of money can properly be expected to do under the conditions ; when its potentialities and limitations are thus laid bare, it sets the problem of central banking in perspective and enables a rational appraisal as to what is of relevance and significance in its practice and what is not.

The level of activity in an economic system, of which the incomes earned may be taken as the index, is determined at any moment of time by the current expenditures on consumption and investment. In order to influence incomes it should, therefore, be possible to influence either the propensity to consume or the propensity to invest. It is usually acknowledged that since the propensity to consume itself depends mainly on the level of incomes it is not directly amenable to control or direction by any monetary authority. However, there is a close inter-relationship between the propensity to consume and the propensity to invest which makes it feasible to influence both profoundly, once a foothold is gained in the one or the other. The mode of inter-action is such that changes in consumption-expenditure affect investment-expenditure through altering the marginal efficiency of investment, and changes in investment-expenditure affect consumption-expenditure through changes in income. Hence although monetary management may impinge itself directly only on the propensity to invest (in so far as it can be influenced through the rate of interest), the nature of the inter-relationship between the consumption and investment functions suggests at once the range

over which incomes may fluctuate due to an initial disturbance in the one or the other in the absence of corrective action, as well as the powers latent in such management to control economic activity.

Role of Investments in the Indian Economy

In systems with low incomes and backward techniques of production (as in India), the propensity to consume at the margin is likely to be high and the propensity to invest relatively small. In other words, if there is an increase in incomes a great proportion of it will be spent on consumption, compared to which the ratio of the expenditure on investment caused by this expenditure on consumption is likely to be small.

It would be wrong to deduce from this that the shifts of aggregate income as the result of initial disturbances will themselves be negligible. With the large volume of unemployed or under-employed resources, usually found in such systems, which can be brought into or discharged from service with small changes in investment, the high propensity to consume may be able to sustain considerable expansions and contractions of income. In fact it can be theoretically shown that the amplitude of income fluctuations in a backward economy with a high propensity to consume and a small propensity to invest may be greater at times than in a more advanced one with a higher propensity to invest but a smaller propensity to consume.

But an inter-relationship of this nature between the expenditures on consumption and on investment does imply two things. In the first place, what monetary management alone can do to control effectively the sum total of economic activity, through its influence on the propensity to invest, will necessarily be very limited. It is therefore no use laying down or pretending that income fluctuations should be its first concern. At the same time it should be recognised that in such a system the growth of real incomes will tend to be restrained by the elasticity of production at the given level, or rate, of investment. In consequence a state of "full employment" may be reached after a relatively small increase in real incomes. So, if monetary management can, by some means, help to increase the rate of investment in the system it will indeed be a substantial contribution to its economic development.

For it is well to understand that the limit to aggregate income placed by "full employment" is not an absolute one; there can be "full employment" at different levels of real income. In advanced economic systems it is usually assumed that the supply of money is infinitely elastic to the demand for purposes of planning investment, and therefore it is taken for granted that the outlay

on investment at "full employment" is at its optimum and that the real income corresponding to it is the highest that can be had. But a similar assumption cannot be made with regard to undeveloped systems for the simple reason that the absence of broad, elastic and efficient mechanisms for the distribution of loanable funds is one of their commonest concomitants. We must therefore allow for the possibility that the lack of 'finance' may deter investments designed to increase productive capacity and cause "full employment" to be reached at levels of real income much below what they would otherwise be.

The conclusion that we may draw from this is that, unlike in the more advanced economic systems of the kind postulated in modern monetary theory, investments, in a backward economy like India, act, not so much as accelerators of income by gaining control of which the speed of its movement can be determined but in the nature of brakes which, when unreleased, constitute a major impediment to movement itself. Monetary management must therefore be judged primarily by its success in introducing that measure of breadth and elasticity in the supply of money which would cease to make investments subservient to considerations of finance rather than by its prospects of controlling income fluctuations as such.

The Distributional Problem in Monetary Management

This distributional problem in monetary management is a more complex one in undeveloped systems than may appear at first sight. Firstly, the less a community is acquainted with the use of credit and the more insistent it is on cent per cent liquidity (i.e., on holding cash) the smaller is likely to be the quantitative effect of creating a marginal unit of legal tender on subsequent debt creations. Therefore the monetary authority in charge of the creation of cash reserves will have to enter into operations on a far larger scale to produce the same effect than if the acquaintance with instruments of credit were greater. Secondly, since the markets for loanable funds tend to be highly heterogeneous in such systems, some being very sensitive to changes and others totally insensitive, the method of altering the supply of money in a few chosen sectors in the expectation that the effect will be transmitted to the others will not only be of no use but, if resorted to, may well create complications in the more sensitive of the markets. Hence the distributive mechanism must have the necessary elasticity to carry loads of great magnitude, quickly and effectively, without at the same time denying to the monetary authority the power to supervise the ultimate purposes to which they are put. Thirdly, due to certain characteristics inherent in banking business, commercial banks tend to have a bias against the less credit-conscious sections of the population so that when they do have dealings with

them it is to collect loanable funds rather than to distribute them. The development of banks as agencies of distribution in the normal way must therefore be a slow and circuitous process.

These then are briefly the potentialities and limitations of monetary management in a backward economy, and though central banks do perform, in practice, a number of functions which have no direct bearing on them, central banking as a technique of monetary management can be appraised only with reference to them. If a central bank does not, or is not able to, adapt its functions and operations to these "institutional" peculiarities, its contribution to the solution of the concrete monetary problems arising in such a system will be necessarily insignificant.

Traditional Approach

However, as noticed in Chapters Four and Five, the role of central banking in India tended to be conceived on very conservative lines. The idea was apparently that it should conform to the established forms already in existence elsewhere rather than that it should strike new paths in the light of the differences in the fundamental data of monetary management. As the country evolved from the age of metallic circulation, when elasticity in the supply of money was dependent mainly on the import of bullion from abroad, into the age of credit, the tendency was to identify 'elasticity' solely with the issue of notes and to regard a central bank as the harbinger of such elasticity. Then, for a time, there were signs of its receiving a wider interpretation and of a growing awareness that the lack of agencies of distribution was as great a limitation as the inelasticity of note-issue itself. An experiment was even made, though under extremely imperfect conditions, to combine central banking and commercial banking functions in one institution. But not only was this interlude short, but its failure had the severe reaction of creating a widespread disbelief in the practicability of effecting such combinations with success. At the time of the establishment of the Reserve Bank there was therefore hardly any dissent from the view that central banking could not legitimately over-step the limits placed by certain traditional functions and operations. In its final form the Constitution of the Reserve Bank proved to be a complete victory for central banking orthodoxy.

The device of direct distribution of money having been already discredited, the Reserve Bank was faced with the problem of establishing relations with the various money markets by a more indirect method. A suitable idea had already been suggested as a result of certain earlier experiences connected with the issue of notes, namely to create a market for bills of exchange. This seemed to fit in very nicely with what was considered appropriate

to central banking. The development of a bill market was therefore accepted as the means by which the Reserve Bank would keep in touch with the money markets and help to "unify" them. Consequently the Bank followed a policy of strict non-competition with the other banks and confined its activities to the encouragement of money-lenders and indigenous bankers to draw bills of exchange which could be discounted either with the Bank itself or with the scheduled banks.

Since the integrity of a bill depended upon the security against it, it was necessary to insist on certain conditions being fulfilled. In the first place, the Bank decided that any assistance through the discounting of bills should only be for the marketing of agricultural crops and not for their production. Secondly, if indigenous bankers were to have their bills directly discounted at the Bank, it was made conditional on their giving up their non-banking business and publishing their accounts. Thirdly, if scheduled banks were to have bills discounted by them rediscounted at the Bank they should be able to prove that the original advances were made against the security of agricultural produce and that the money-lenders responsible were themselves credit-worthy.

The unwillingness of money-lenders and indigenous bankers to subject themselves to discipline and supervision, and the absence of a warehouse system in the country, were alone perhaps sufficient to frustrate the whole plan. In addition, there was nothing to create that demand for bills from banks which was vital to the growth of a market in them. Thus it was not surprising that after ten years of the Reserve Bank's professed patronage, the bill market was as far away from realisation as ever. It may also be added that even if every expectation was fulfilled the bill market would have been concerned only with marketing-finance.

The policy of non-competition did not pay any better dividends in the more organised sectors of the money market. Though instances were not wanting when the scheduled banks were in need of assistance, most of them never approached the Bank throughout the pre-war years. The part played by the Imperial Bank was in marked contrast to this self-imposed insulation. After 1935, the Imperial Bank took active steps to make call loans against Government securities at the Bank Rate, to extend the benefit of secured loans on a call money interest-basis to the other banks, and to make advances to them at its special 'Advance Rate'. By these means, the Bank was in a position to wield considerable influence over the market conditions even as early as 1937.

Thus, in effect, the Reserve Bank's policy regarding its loans and discounts not only contributed very little to the solution of the distributive inelasticity in the supply of money but deprived

it of such influence as it could otherwise have exercised by way of monetary management.

Restraints on Unorthodoxy

One of the less orthodox operations allowed to the Reserve Bank to make changes in the supply of money was to purchase or sell assets in the open market on its own initiative. Being in charge of the management of the public debt, it could also have produced the same effects by lending directly to the Government when it could alternatively have floated the loans to be absorbed by the market, and *vice versa*. In theory such open market operations could have been employed for various purposes, and in practice they were the mainstay of most central banks during the inter-war period.

On a superficial examination it would appear that the Reserve Bank had considerable scope in undertaking open-market operations and effecting variations in the supply of money to make up for its isolation *via* loans and discounts. But there were, in fact, a number of limitations in pursuing such a policy. The first was strictly statutory in character. A certain proportion of the assets in the Issue Department had to be in the form of gold or sterling securities, and since notes were the most popular media of monetary circulation, the Bank could not incur liabilities beyond levels determined by the volume of these assets. As was clearly shown in the busy season of 1939, the range of choice which this left to the Bank was not very appreciable.

Secondly, the effect which could be produced on the total supply of money through an initial change in cash reserves by the central monetary authority was limited by various factors connected with the banking system. In the first place, as banks were only a small proportion of the financing agencies in the country and as the use of deposits as media of exchange was restricted to certain sections of the population, the "multiplying" effect of the banking system was on a very reduced scale. Secondly, since the ratio of cash reserves to incomes was itself likely to fluctuate within wide and unpredictable limits, the extent of the change in the reserves of banks which could be made through changes effected elsewhere was also indeterminate. Thirdly, the banking system did not maintain a consistent cash ratio, so that even if the increased or decreased reserves did register themselves on it the effect might well have been neutralised by changes in the cash ratio.

Assuming that the Reserve Bank could have, in spite of all these limitations, made changes in the supply of money on its own initiative, what purpose could it have put them to? As far as the money-lenders and indigenous bankers were concerned, an

increase in the supply of money would have made no difference except in so far as the banks were thereby more inclined to extend credits to them. But the relationship between them was much too slender for this to have assumed significant proportions.

The main alternative was therefore the "cheap money technique", an example of which had already been set in Britain. It would have consisted in persuading the banks to make greater investments in gilt-edged securities, thus reducing the yield on them, and hoping that the effect of this on the rates of interest in general would induce more outlays on investment. But this too had its limitations. Any lowering of the yield on rupee gilt-edged much below that on sterling gilt-edged would have stimulated an out-flow of funds from the country for investment in London. By reducing the sterling-assets held by the Bank, which would have required, in turn, the contraction of money supply, the policy would have defeated itself. Secondly, in the absence of institutions to assist in flotations of capital, an increase in the prices of gilt-edged securities, even if shared by industrials, could not have much significance for new issues. Lastly, under the immature conditions of the capital market, the main effect of rising gilt-edged prices would have been to stimulate speculation and to discourage prospective investors from entering it.

Thus, whatever the angle from which we look at it, it is obvious that the Reserve Bank's scope for monetary management, in any real sense, was severely restricted. In one way, the source of this impotence may be traced to the obligation, which it was considered essential to lay upon it, to maintain the sterling standard at the given exchange rate of 1s. 6d. to the rupee. It meant that, though divorced from gold, monetary management was still subject to the same kind of considerations as under the regime of the gold standard. If the choice was forced on it, the Bank had to sacrifice all its other treasured objectives to the needs of that "barbarous relic". But, on the other hand, the need to maintain the sterling standard at the given exchange rate could, by itself, be no obstacle in the way of a bolder approach to the problem of distributive inelasticity. If the Bank was in a position to distribute loanable funds to those who were in need of them for purposes of investment and if it could exercise sufficient control over the agencies of distribution, it would not have detracted from its ability of managing the supply of money in accordance with the balance of payments, but would only have enabled it to determine the incidence of its operations with greater selectiveness and precision. The fixed exchange rate was the most glaring handicap to effective monetary management in the pre-war period, but it was not the most fundamental.

Lessons and Consequences of War Finance

In less than five years of the establishment of the Reserve Bank the war broke out and the management of money in India, as in every other belligerent country, became dominated by the exigencies of war finance. It may seem, therefore, that the subsequent period does not really fit into the general scheme of an analysis, concerned with the enquiry how far the operations of the Bank were in conformity with lines indicated and sanctified by modern monetary analysis. Nevertheless these six years have their own importance.

In the first place they witnessed the foremost experiment in deficit-financing of recent times in India. Though essentially a by-product of the war, the financing of Government deficits, viewed simply as large-scale supplementation of savings with created money, betokens an effective line of development in undeveloped systems requiring large doses of investment. The actual agency (or agencies) chosen for being financed in this manner is, of course, a matter to be decided on grounds of principle, convenience, and expediency. On present showing there is reason to expect that the State will play a large part, but this does not by any means rule out the possibility of the Bank financing other institutions like co-operatives and industrial finance corporations.

Considering the fact that the deficit incurred by the Government in the period 1939-45 were attributable to investments, which could only be remotely described as productive, the experience gained in their financing is not discouraging. Placed so close as we are to the discomforts and dislocations caused by war we are apt to attach too much importance to them and not enough weight to the difficulties and limitations inherent in this experiment which, in future, are capable of being reduced or eliminated. It is no small achievement that over Rs. 3,300 crores of deficit expenditure were financed in just over six years with little positive co-operation from the public, with belated and stop-gap arrangements devised at the spur of the moment, with a bare minimum of the necessary mechanisms of control, and in the face of various other hostile factors. Certainly not enough attention has been paid to the remarkable way in which the foothold was regained and the surging tide of inflation stemmed after everything had seemed well nigh lost in 1942.

Secondly, the period of the war represents a distinct phase in the history of the Reserve Bank which will leave its mark, through changes that have taken place both in ideas and in conditions, on the future development of monetary management in India. The direct effect of war finance was to reduce monetary management to a routine for making available the necessary supply of money. In the earlier half of the war, the amount realised through

borrowing from the public was small and the greater part of the deficits had to be financed by the creation of money. Though later the proportion was measurably reduced, the absolute increases in "created" money were still considerable as the deficits were themselves increasing. In a mainly note-using system it was also inevitable that the increase in supply had to be effected largely by an expansion of the liabilities of the central bank. The end of the war thus saw the Reserve Bank in a weaker position to influence the money markets, without the aid of direct controls than before it.

The period also witnessed other changes. For instance various circumstantial factors conspired together in removing the towering dominance of the exchange-rate problem over the internal management of money. It is not suggested that the exchange-rate problem does not exist any more. But neither the obligation to maintain the external value of the rupee at 1s. 6d. sterling nor the direct quantitative relationship between the supply of money and the foreign exchange holdings of the Bank are as rigid today as they used to be.

Again, the inflationary rise in prices during the war benefited the rural farming population of the country. This has distinctly helped to lighten the problem of agricultural indebtedness which was one of the major impediments to the improvement of agricultural finance in the pre-war period. It hardly needs mention that the war has also given a powerful fillip to industrialisation.

Above all, the whole economic philosophy and the political set-up within whose boundaries the Reserve Bank has hitherto functioned are in the process of radical change. Where it will ultimately lead to is more than can be guessed now with profit, but its effects, in the immediate future at any rate, are foreseeable.

Nationalisation Issue

After the experience of war-time, when the Reserve Bank became, for all practical purposes, a department of the governmental machinery, and when irksome statutory restrictions in the Bank Act were brushed aside by suitable Ordinances, it will need a great deal of persuasion to convince anyone that it has an "independence" which it stands to lose by being nationalised. The history of central banking, in India as elsewhere, has clearly shown that when a Government is determined to have its own way, a central bank, whether government- or private-owned, is seldom, if ever, successful in resisting the pressure. The so-called independence is therefore really operative only in periods of interval when the public interest in the affairs of the institution is not at a high pitch.

Moreover if the mere fact of ownership lays a central bank open to extraneous influences, surely that must be just as true when it is in the hands of private shareholders as when it is in the hands of the Government. It is certainly not untenable that private ownership of the machinery for creating or extinguishing money (even when controlled) carries with it the threat that it may, consciously or unconsciously, follow a policy that represents the outlook of a particular class and may be, in a subtle way, against the general current of public opinion. In any case it is incomprehensible why democratically elected governments, charged with responsibilities of far greater consequence, should be considered as lacking in discretion and commonsense in just this sphere of activity.

The nationalisation of the Reserve Bank, a proposal recently mooted, may therefore become an accomplished fact very soon. The best guarantee that the Bank will function in the national interest is not private ownership but the quality of the managing personnel and certain indefinable traditions that can and should develop in the relations between the Bank and the Government.

Other Changes in the Data of Monetary Management

In the second place it is likely that, given a strong and stable national government, there will be a greater willingness than existed before to venture into bold schemes of economic development, without being inhibited too much by financial orthodoxies or by fears of charges being raised against it of trespass and undue interference. Creation of money to fill deficits in public expenditure, government assistance in the development of credit facilities, and imposition of such direct controls as are deemed necessary for the ends in view may therefore be considered as given data in the future of monetary management in the country. But there are certain characteristics inherent in the political and economic situation, tending to restrain the range and intensity of change, which must also be taken into account in any realistic assessment of the future. For instance it is improbable that the State will undertake investment on a scale that makes it inconsequential whether adequate finance is available or not for private investment. Similarly no one can expect the Government to start granting loans on its own in its desire to improve credit facilities. Even the controls that it may be prepared to retain will probably be on the small side.

Hence while we must allow for various changes in the data of monetary management we must be on our guard against allowing for too much or too many. In fact there is even a great danger that all major reforms in this field may come to a standstill after the nationalisation of the Reserve Bank. For nationalisation, these days, is a magic word which, whatever its actual scope or function, sets at rest many a rebellious and discontented heart.

While it will be a step in the right direction it is well to remind ourselves that the nationalisation of the Reserve Bank will only confirm by law a relationship which has now existed for some time, and that, by itself, it will in no way remove those limitations which have so prevented it from becoming an effective force. The basic problem to be overcome, let it be repeated, is the creation of a mechanism of monetary distribution which will have the necessary breadth and elasticity to carry loads of great magnitude quickly and effectively without, at the same time, denying to the Reserve Bank the power to supervise the ultimate purposes to which they are put. For any progress to be made in this direction there is a certain minimum of change that must be effected.

Hitherto the approach to this problem has been extremely conservative. The basic premise appears to have been that central banking was something self-contained and holy in itself, not to be defiled by incursions into the sphere of commercial banking. It followed that for introducing such elasticity as it was desired to effect, the central bank had to go through the agencies already existing and not by-pass them through direct intervention. This might have been satisfactory enough if the agencies in the field were fairly well organised, but since the larger section of them in the country were primitive and undisciplined the criteria of elasticity and of control could not be reconciled without seriously undermining the one or the other. In practice, discretion proved to be the better part of valour, and consequently the problem of distributive inelasticity in the system received no amelioration.

It is time we considered seriously whether it is necessary any longer to sacrifice the content of monetary management in India in deference to the requirements of outworn orthodoxies which hold back the Reserve Bank today from more direct and active participation in the affairs of the money markets. The simplest and the most straightforward way of introducing elasticity into the supply of money without endangering the control of its use would seem to be through the Reserve Bank assuming on itself the powers and responsibilities of direct distribution. Carried to its logical conclusion this would mean a nationalised banking system, consisting of a wide network of distributive agencies over the length and breadth of the country and managed by the Reserve Bank (with, of course, such devolution of functions to regional central banks as is found convenient).

But once again we must allow for the fact that not only will not nationalisation on such a wide scale be a feasible proposition for some time to come but that even if it were done it will itself contribute very little to the development of modern credit facilities in the vast unexplored areas of the countryside. Hence we need to make suggestions whose immediate practicability is beyond dispute.

Some Suggestions

Firstly, a revival of the principle of "mixed" central-and-commercial banking, which has been abandoned ever since the 'twenties, should enable the Reserve Bank of India to play a more dominant role in the affairs of the organised money markets and in taking the initiative in the development of branches in hitherto untouched areas. To start from scratch in competition with banks which have already deep roots in the country may, however, prove too difficult in the initial stages to be successful. Hence as a preliminary measure, the Imperial Bank of India, which has already a vast network of branches and which has for a long time been wavering between commercial and central banking functions, may be nationalised and amalgamated into the Reserve Bank. This will make the latter the most powerful financial institution in India. The other banks must continue to receive the same assistance as hitherto (if not more) from the Reserve Bank, so that the competition from it as a commercial bank is combined with the normal services of central banking to stimulate a rapid development of credit facilities over the length and breadth of the country.

Secondly, as a measure of precaution, the Reserve Bank should be given the right to issue specific instructions to the commercial banks on any particular aspect of their operations which is either running counter to its general monetary policy or which, it believes, can be adjusted to strengthen it.

It must, however, be clear that whatever may be done in this manner to strengthen, to consolidate and to extend the influence of banking institutions, the problem of rural finance in India will not receive any substantial relief in the near future unless advance is made on a broader front. For at least as far as the backward and poorer classes of agricultural producers (who are the majority) are concerned, something more than the creation of credit institutions is necessary. The possibilities of renovating the co-operative movement therefore deserve the serious consideration of the Reserve Bank and the Government. Agricultural indebtedness, which was once a great handicap, has fortunately been wiped out to a great extent in the course of the war. This is therefore an auspicious moment to make a fresh approach.

To overcome the influence of money-lenders and indigenous bankers, which however satisfactory it may seem to some in the absence of better credit facilities has nevertheless been derogatory to the interests of the rural masses, it is necessary to do more than just offer alternative sources of credit. The aim of any reform movement must be to present an adequate substitute for all the services that the money-lenders and indigenous bankers have so far provided. In particular, co-operative credit can succeed only if it undertakes the function of marketing agricultural produce.

If the co-operative agency in a village also provides consumer goods for the inhabitants, and embarks on various other enterprises which add to their comfort and convenience, the advantages of dealing with it will become irresistible. What is therefore required in India is the development of multi-purpose co-operatives. But this is a project which, in the initial stages, will require vast capital investment for the buildings and godowns. It cannot be expected to be undertaken by the existing co-operative movement without considerable assistance from the Government.

Lastly, in the sphere of long-term finance, the establishment of subsidiary institutions under the auspices of the Reserve Bank may be suggested. Dealing as they shall do with a different field of finance, requiring more expert knowledge and concerned with commitments of longer duration, it is essential that they should be separate from others and have a certain degree of autonomy. But provision must also be made for the Reserve Bank to subscribe to their loanable funds, just as it is permitted to accommodate the Government's long-term needs by expanding its gilt-edged portfolio. These specialised institutions, in their capacity as promoters of various enterprises in the country, should also be given the function of passing on the shares to genuine investors.

It will be noticed that many of the suggestions made here resemble closely the features of the proposed banking reform in Australia. In fact, in view of the greater magnitude, complexity and urgency of the problems confronting India, we cannot afford to be less radical.

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